Third International Conference on
Canadian, Chinese and African Sustainable Urbanization

ICCCASU

"THE BELT AND ROAD" & NODE:
New Influences and Paradigms in City Building

Conference Proceedings

Chengdu, China
July 15-17, 2019
ICCCASU2019.org

UN HABITAT
FOR A BETTER URBAN FUTURE

CHINA CENTER
FOR URBAN DEVELOPMENT
国家发展和改革委员会城市和小城镇改革发展中心
中国城市和小城镇改革发展中心

uOttawa

ICCCASU

Organizers

UN-HABITAT FOR A BETTER URBAN FUTURE

CHINA CENTER FOR URBAN DEVELOPMENT
国家发展和改革委员会城市和小城镇改革发展中心
中国城市和小城镇改革发展中心

uOttawa

CCCASU

Institutional Partners

McGill

UNIVERSIDADE EDUARDO MONDLANE

Carleton UNIVERSITY

ASIAN INSTITUTE | munk school OF GLOBAL AFFAIRS & PUBLIC POLICY

UNIVERSITY OF TORONTO

Development Workshop ANGOLA

1927
東南大學建築學院

UNIVERSITY OF TORONTO
School of Cities

AFRICAN URBAN RESEARCH INITIATIVE

Azrieli School of Architecture & Urbanism
Carleton UNIVERSITY

McGill
Peter Guo-hua Fu School of Architecture

ÉDIM SIDGS
École de développement international et mondialisation
School of International Development and Global Studies
uOttawa

西南民族大學
城市規劃與建築學院
ARCHITECTURE AND URBAN PLANNING COLLEGE

厦门大学环境与生态学院
COLLEGE OF THE ENVIRONMENT & ECOLOGY XIAMEN UNIVERSITY

浙江大学建筑工程学院
COLLEGE OF CIVIL ENGINEERING AND ARCHITECTURE, ZHEJIANG UNIVERSITY

Associated research Centers for the Urban Underground Space
Association des Centres de recherche sur l'Utilisation Urbaine du Sous-sol

上海大学高等研究院
INSTITUTE FOR ADVANCED STUDY, SHANGHAI UNIVERSITY

Coastal and Ocean Management Institute (COMI), Xiamen University
厦门大学海洋与海岸带发展研究院

Canadian URBAN Institute

FEICOM
CAMEROUN

尚德智汇
sun-golden

ICCCASU III-Chengdu 2019

3rd International Conference on Canadian, Chinese and African Sustainable Urbanization

"The Belt and Road" & Node:

New Influences & Paradigms in City Building

CONFERENCE PROCEEDINGS

International Convention (Chengdu Century City)
New International Convention and Exhibition Center (Chengdu Century City)

Chengdu, China
15-17 July 2019

Words of Welcome
from UN-Habitat Executive Director

It is a real pleasure for the United Nations Human Settlements Programme (UN-Habitat) to record our congratulations at the opening of the third session of the International Conference on Canadian, Chinese and African Sustainable Urbanization (ICCCASU III).

The theme at the centre of the discussions at the recently concluded UN-Habitat Assembly- "Innovation for a better quality of life in cities and communities", highlighted the importance for more effective urban planning processes and procedures. In his speech, the Secretary General of the United Nations, António Guterres, said that 60% of the urban infrastructure required by 2030 has not yet been built. In order to meet this expectation while ensuring that standards are improved, the world needs more well-planned and better managed urbanization. Only by constant innovation focused on ensuring better quality of life of the greatest number of people will development be sustainable. This is the overall direction of the UN-Habitat strategic plan for the period 2020-2023.

This ICCCASU III conference, to be held in Chengdu, jointly organized by the Government of China and the cosmopolitan city of Chengdu, will focus on the theme '"The Belt and Road" & Node'. The conference will explore innovative solutions to promote sustainable urbanization in China, Canada and Africa. I sincerely hope that the conclusions of this conference will support the implementation of the Regional Centre of Excellence for Sustainable Urban Development in Africa, as recommended by the participants in ICCCASU II and endorsed by the Government of Cameroon in December 2017. Training, research and advisory services are the Centre's three pillars of intervention; it intends to position itself as a hub for the analysis and dissemination of innovative approaches to participatory urban planning, inclusive human settlements design, and integrated urban management.

I would like to take this opportunity to thank the Chengdu Municipal Government and the China Center for Urban Development (CCUD) for hosting this third Conference, along with the Third International High-Level Forum on Sustainable Urban Development (SUDIII). I also thank the Government of Canada and especially Global Affairs Canada for their continued support. Finally, my gratitude also goes to the Government of Cameroon, whose Ministry of Housing and Urban Development chairs the ICCCASU II. These collaborations would not have been possible without the strong partnership between the University of Ottawa and UN-Habitat, joint promoters of this conference.

In conclusion, I would like to thank all the participants, keynote speakers, subject experts and students who made the trip to attend ICCCASU III. I wish you good deliberations and a pleasant stay in Chengdu.

Maimunah Mohd Sharif
Under-Secretary-General of United Nations
and Executive Director of UN-Habitat

Words of Welcome
from the President of the University of Ottawa

The University of Ottawa is delighted that ICCCASU is continuing its partnership with UN-Habitat to stage its third conference, ICCCASU III. Interaction with China and Africa supports one of the pillars of our *2020-2030 Strategic Plan*, namely the internationalization of the University. ICCCASU plays an important role as an international think-tank, offering opportunities to learn, to grow and to share experiences across the world.

One of the outcomes of ICCCASU's 2017 conference was a commitment to create a regional centre of excellence for sustainable urban development in Yaoundé, Cameroon. This Centre will be an institutional platform for the exchange of knowledge among experts in Canada, China, Africa and other regions in the world. The University of Ottawa strongly supports this initiative and is pleased that ICCCASU will be partnering with the Centre on research and training in the area of urbanization and the environment.

ICCCASU III, which takes place in Chengdu, China, is the fruit of the efforts of numerous contributors and partners. First and foremost, the University would like to recognize ICCCASU's ongoing partnership with UN-Habitat. We also wish to thank the government of Canada for its continuing support for ICCCASU through Global Affairs Canada. The conference would also not be possible without the invaluable support of the China Center for Urban Development, the Municipality of Chengdu, and our ongoing partnerships with Canadian, Chinese and African universities and think-tanks. A sincere thanks to all those involved in this important initiative.

On behalf of the University of Ottawa, I extend my warm welcome to all distinguished guests, speakers and participants of ICCCASU III, and offer my best wishes for an insightful and successful conference.

Jacques Frémont
President and Vice-Chancellor
University of Ottawa
Ottawa, Canada

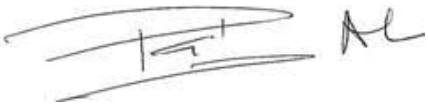
Words of Welcome
from ICCCASU Co-Presidents

We are delighted and greatly honored to welcome you to the third edition of the International Conference on Canadian, Chinese, and African Sustainable Urbanization (ICCCASU III) here in Chengdu, China. Having met first in Ottawa, Canada in Oct., 2015, then in Yaoundé, Cameroon in Dec., 2017, it was important that our third conference take place here in China. Together Canada, Africa and China comprise the three regions on which our initiative is focused. The meeting here in Chengdu in July 2019 is a truly milestone worth celebrating.

The theme of ICCCASU III, namely '"The Belt and Road" & Node', recognizes the crucial relationship between investment, infrastructure and urbanization, and acknowledges China's expanding role in the world in the realm of city building in the 21st century. Home to approximately 9 million people, our host city, Chengdu, doubled in size from 2 to 4 million between 1980 and 2000, then doubled again in the last two decades. Holding our third conference here provides us with a first-hand opportunity to admire, review, debate and otherwise learn from the ways in which the city has managed rapid growth and sustainable urbanization. Over the next two days, participants from more than 22 countries and around 100 institutions will share knowledge and best practices to help us tackle common challenges to effective and prosperous urbanization.

Having staged conferences in each of our three regions of interest – Canada, Africa and China, - we would like to recognize ICCCASU's founding partners, the UN-Habitat and the University of Ottawa, for their extraordinary collaboration and sustaining support. We are pleased that ICCCASU has expanded its core partners to include a consortium of Canadian universities, namely the University of Ottawa, Carleton University, l'Université de Montréal and McGill University. We also extend our gratitude to Global Affairs Canada, the Cameroon Ministry on Housing and Urban Development, and the numerous institutions and entities whose logos appear on our website. It is absolutely crucial that we acknowledge the key role that the China Center for Urban Development (CCUD) has played in making this conference happen. Without the support of the CCUD, in partnership with the municipal government of Chengdu, this conference would not have been possible. We owe a deep debt of gratitude and esteemed recognition to the CCUD and the city of Chengdu.

Finally, we thank all of you, our dear participants, for taking the time and making the effort to be here with us today to discuss innovative approaches towards Sustainable Urbanization. Please enjoy the third edition of ICCCASU.



Alioune Badiane
ICCCASU Honorary President
President
The Urban ThinkTank Africa, Senegal

Rafael Tuts
ICCCASU Co-President
Director
Programme Division, UN-Habitat

Huhua Cao
ICCCASU Co-President
Professor
University of Ottawa, Canada

TABLE OF CONTENTS

BIOGRAPHY

ICCCASU Honorary President

Alioune Badiane

Director (Rtd) Programme Division UN-Habitat
President, The Urban ThinkTank Africa (TUTTA), Senegal

Dr. Badiane is a Senior Urban and Regional Planner with extensive working experience in both central and local governments and at the international level. He has over thirty-five years of accumulated experience working for the United Nations as well as for Government Ministries in Senegal related to Economic Planning, Housing, Decentralization, Urban Development, and Environment. Dr. Badiane served as Director of Dakar City Planning, Principal Policy Advisor to the Mayor of Dakar, and as elected Municipal Councilor and Chairman of the Planning and Environment Commission in home town Meckhe in Senegal. He joined UN-Habitat as Chief Technical Adviser (CTA) and International Human Settlements Adviser to the Government of Haiti in 1991. He was appointed by UNDP, World Bank, and UN-Habitat as Regional Coordinator of the Urban Management Programme (UMP) in 1992, Director of Regional Office for Africa and Arab States of UN-Habitat between 1999 and in 2011. From 2011 until Oct 2016 when he retired, he was the UN-Habitat Director of Programme Division. During his long career and service with the UN, Dr. Badiane has directed, managed and coordinated United Nations global, regional and national projects and programmes in Africa, Asia the Arab States and in the Caribbean regions. Dr. Badiane studied economics at the Senegal National School of Economics and later graduated from Laval University in Canada and attended his Post Graduate Studies at the Department of Urban Affairs in City University of New York at Hunter College. Dr. Badiane was awarded the title of Doctor Honoris Causa of the University of Minna of Niger State. He is currently the President of The Urban Think Tank Africa (TUTTA) for the implementation of the new urban agenda in Africa. Dr. Badiane is the Honorary President of the International Council for Canada, China and Africa (ICCCASU) and the Co-founder of the RESAUD network based in Montreal. He is also as Chair of the Advisory Council of the African Forum for Urban Safety (AFUS) based in Durban and Special Advisor to the United cities and local Governments of Africa (UCLG-A). Dr. Badiane is closely collaborating with government and city partners as well as bilateral and multilateral institutions such as UN-Habitat, African Union, the World Bank, AFDB and UCLG-A to implement the New Urban Agenda in Africa.

ICCCASU Co-Presidents

Rafael Tuts (Keynote Speaker)

Director, Programme Division UN-Habitat, Nairobi, Kenya

Rafael Tuts is Director of the Programme Division of UN-Habitat, based at its Headquarters in Nairobi, Kenya. He is overseeing the work of UN-Habitat's seven thematic branches and four regional offices. From 2012 to 2016 he was the coordinator of the Urban Planning and Design Branch of UN-Habitat, promoting compact, integrated and connected cities that are inclusive and resilient to climate change. From 2014 to 2016 he was also overseeing the Housing and Slum Upgrading Branch of UN-Habitat, focusing on the 'Housing at the Centre' approach and the Participatory Slum Upgrading Programme. Earlier assignments at UN-Habitat include his role as manager of the Localising Agenda 21 Programme, as a contributor to the Global Campaign on Urban Governance and as Chief of the Training and Capacity Branch. Following the Rio+20 Conference, he coordinated UN-Habitat's engagement in formulating the Sustainable Development Goals, including SDG-11 on 'making cities and human settlements inclusive, safe, resilient and sustainable'. He authored and co-edited several publications on a wide range of sustainable urban development topics, including 'Urban Trialogues', a book reflecting on urban space as a resource for sustainable development, based on work in Morocco, Kenya, Vietnam and Cuba. Together with colleagues from the World Bank, UNEP and Cities Alliance, he received the World Bank Vice-President Team Award in 2011 for global partnership building on Cities and Climate Change. He also received ISOCARP's 50th Anniversary Award in 2015, in recognition of UN-Habitat's urban planning work. Before joining UN-Habitat in 1995, he worked for the Department of Architecture, Urbanism, and Planning of the University of Leuven in Belgium and the Housing Research and Development Unit of the University of Nairobi. In 1985, he obtained a Master of Science degree in Architectural Engineering from the University of Leuven. In December 2016, he was awarded the title of Honorary Professor from the same university.

Huhua Cao

Full Professor, University of Ottawa, Canada

Dr. Cao is a cross-appointed Full Professor within the Department of Geography Environment and Geomatics and the School of International Development and Global Studies at the University of Ottawa in Canada. He specializes in urban studies and International development with the use of geostatistical and spatial methods. In recent years, Dr. Cao's research has focused on engaging urban indigenous and ethnic minority peoples in urban contexts. He has directed various international research projects that have received significant funding from Canada, China, Cameroon, and the European Union. Professor Cao has also written numerous articles and books related to urban and regional development while collaborating with academics

throughout the world. Professor Cao has also published almost 100 books, chapters, articles and reports related to urban and regional development while collaborating with academics throughout the world. Since 2014, Dr. Cao has worked closely with the United Nations Human Settlements Programme (UN-Habitat) to organize a series of International Conference on Canadian, Chinese and African Sustainable Urbanization (ICCCASU). ICCCASU is an international think-tank for exchange and cooperation on issues relating to sustainable urban development (www.ICCCASU2019.ORG or www.ICCCASU.ORG).

ICCCASU III Vice-Presidents

Yanli Gao

Director, China Land Surveying and Planning Institute

Mr. Gao is the director of the China Land Surveying and Planning Institute, Vice Chairman and the Secretary-General of the China Land Science Society, and the director of the sub-technical committee of the National Land and Resources Standardization Technical Committee on Land Resources Planning, Investigation and Evaluation. He served as the Deputy Director of the Office of the Leading Group of the Second National Land Survey of the State Council and organized the second national land survey. Since December 1986, he has successively worked in the former State Land Administration and the Ministry of Land and Resources, and has served as Deputy Director and Director of Cadastral Management Department of the former Ministry of Land and Resources. He is Long-term engaged in land technical methods system of resources survey and monitoring, standard formulation, major project implementation, as well as business and technical management work. He has made an important contribution to the promotion of land resources survey and monitoring technology progress and discipline development. He was elected to receive special allowances from the Government of the State Council.

Aijun Qiu

Deputy Director General, China Center for Urban Development

Senior Research Fellow, Deputy Director General of China Center for Urban Development, National Development and Reform Commission, P.R.China

As policy researcher, QIU Aijun had worked in China Center for Town Reform and Development, the State Council Office for Restructuring Economic System from 2001 to 2003 and vice mayor of De Yang city in Sichuan province in 2017. Her research field is focused on urbanization, urban sustainable development, resilient city and community development. She had involved in previous policy research for national plans including the 12th Five-Year Development Plan, the 13th Five-Year Development Plan and New-type National Urbanization Plan (2014-2020). As team leader or main researcher, she has participated in developing strategies and plans for cites and small towns. As project director, she had managed two

UNICEF projects. As national consultant, she had conducted many technical assistance projects for World Bank, European Union, the Asian Development Bank, and other international organizations. Her publications are focused urban development, such as Study on Planning for Healthy Urban Development, Review of Town and Regional Development Plans in China, Study on Policy Options of Urbanization Strategy in China. She has got several ministerial awards of the 2nd or the 3rd prize for her policy research reports.

Inês Macamo Raimundo

Professor, Eduardo Mondlane University, Mozambique

Dr. Inês Macamo Raimundo holds a PhD in Forced Migration and Master in Human Geography (focus on internal migration) by the University of the Witwatersrand, Johannesburg, South Africa and Licenciatura (Bhonors) in Geography by Eduardo Mondlane University (Mozambique). Raimundo has taught at Eduardo Mondlane University for 25 years where she trained several undergraduate and postgraduate students in Human Geography, Geography of Population, Geography of Migration, Environment and Population and Development and urban issues. She is Associate Professor and Senior Researcher of Eduardo Mondlane University. Prof. Raimundo **is** Representative for Southern Africa of Commonwealth Geographical Bureau (CGB) and member of International Council for Sciences (ICSU)-Regional Committee for Africa (RCA). She has lead research in migration as member of SAMP (Southern African Migration Program), and AFSUN (African Food Security Urban Network). Her major research has focused on urban studies and migration linked with poverty, HIV and gender, food security and informal economy. At University she has chaired the position of Deputy-Dean of Post-graduate studies (2012-2017), Director of the Center for Policy Analysis (2010-2012), Head of Department of Population Studies of the Center for Policy Analysis (2008-2010) and Head of Department of Geography (2002-2003). Currently, she leads the Department of Academic Assurance of the Faculty of Arts and Social Science.

Rong Yang

Focal point of UN-Habitat with Government of China
Inter-Regional Advisor, Technical Advisory Branch, Programme Division, UN-Habitat

Rong Yang is the Inter-Regional Advisor working at Programme Division of UN-Habitat based at its Headquarters in Nairobi, Kenya, and involving in UN-Habitat project cycle management in Programme Division since 2016. He is also the focal point of UN-Habitat with Government of China and in charge of coordinating the general matters of cooperation with China including World Cities Day Celebration, International conference and training focusing on knowledge exchange regarding sustainable urbanization, cooperation project development and implementation with Chinese partners, collaboration based on Belt and Road Initiative (BRI) and South-South Cooperation Assistant Fund etc. From 2008 to 2016, Mr. Rong Yang used to work as Director-General of Center of Science & Technology and Industrialization, and

Director-General of Department of Building Energy Efficiency And Science & Technology in the Ministry of Housing and Urban-Rural Development (MOHURD) of China, was mainly focusing on promoting development of green building, building energy efficiency, smart city, advanced building technology application and related international cooperation in China. From 2001 to 2003, he used to be the Deputy Permanent Representative of China Mission to UN-Habitat.

ICCCASU III Keynote Speakers

Bojie Fu

Member of Chinese Academy of Science
Distinguished professor at the State key Lab of Urban and Regional Ecology,
Chinese Academy of Sciences

Dr. Bojie Fu earned his doctorate degree from a joint PhD program of Peking University and University of Stirling in 1989. He is an Academician of Chinese Academy of Sciences, Fellow of the Academy of Sciences for Developing World (TWAS) and Corresponding Fellow of the Royal Society Edinburgh UK. Dr. Fu serves as a professor and chair of Academic Committee of Research Centre for Eco-Environmental Sciences, Chinese Academy of Science, Dean of Faculty of Geographic Science at Beijing Normal University and Deputy of Division of Earth Science at Chinese Academy of Sciences. He is also the President of Chinese Geographical Society, Vice President of International Geographical Union (IGU) and Deputy Director of Scientific Committee of Chinese Ecosystem Research Network. Dr. Fu is one of pioneers for the development of landscape ecology in China. His achievements made significant contributions to the understanding of interactions between landscape pattern and ecological processes, land use change and ecological effects, and ecosystem services assessment and management. He has published over 10 books and 400 scientific papers, 280 of which were published on SCI journals including *Science, Nature geoscience* and *Nature climate change*. He also serves as a Chief Editor of *Chinese Geographical Science*, *Acta Ecologica Sinica* and *Advances in Earth Science*, and member of editorial board of *Landscape Ecology*, *Landscape and Urban Planning*, *Current Opinion in Environmental Sustainability*. His prizes include China National Natural Science Prize (2005), Award of Distinguished Service of the International Association of Landscape Ecology (2011), Outstanding Science and Technology Achievement Prize of CAS (2012) and The Ho Leung Ho Lee Science and Technology Prize-Geosciences (2017).

Joe Berridge

Urban Planner/Partner, Urban Strategies INC, Canada

Joe Berridge is an urban planner and city builder who has had an integral role in the development of complex urban planning and regeneration projects in Canada, the U.S., the U.K.,

Europe and Asia. He has been strategic advisor for the development of the city centres of Manchester, Belfast and Cardiff and for the waterfronts of Toronto, Singapore, Sydney, Cork, London and Governors Island in New York City. He has prepared campus master plans for the University of Manchester and Waterloo, Queen's and Western in Canada and is now planning the new hub for Toronto Pearson International Airport. Joe teaches at the University of Toronto and is a Senior Fellow at the Munk School of Global Affairs and Public Policy. Joe's book 'Perfect City' will be published by Sutherland House in April 2019.

CONFERENCE THEMATIC AREAS

In collaboration with UN-Habitat and the China Center for Urban Development (CCUD), the third International Conference on Canadian, Chinese and African Sustainable Urbanization (ICCCASU III) will be held in Chengdu, China from July 15-17, 2019. Under the theme of "The Belt and Road" & Node: New Influences & Paradigms in City Building, the conference will look broadly at issues facing cities in rapidly urbanizing areas of the world. Within each of the topic areas identified below, special focus will be given to the expanding influence of China on the global stage, the impact of Chinese investment in Africa, and on opportunities to strengthen cooperation between China and Canada in third-party markets (e.g., Africa), related to city building.

Moving beyond the conventional practice of North-South or South-South cooperation, ICCCASU fosters a triangular dialogue between African countries, Canada and China. The conference will bring together researchers, practitioners, and decision-makers from the public, private and civil society sectors to explore challenges to urban development in Canada, China and Africa – with a focus on city-building in the so-called Asian Century. The term "Asian Century" acknowledges the volume and rate of contemporary urbanization in Asia coupled with increasing economic and political influence of Asia in the 21st century. This topic is particularly relevant to ICCCASU III as the three countries/continents in our regime represent different perspectives/experiences in this transition of influence. In the context of of the New Urban Agenda (NUA), ICCCASU III will focus on urbanization both within and driven by Asian actors, including China's Belt and Road Initiative (BRI).

ICCCASU III will examine current urban development models in Canada, China and African countries in order to identify how best to address fragility, reduce vulnerability and promote efficiency, prosperous and smart urban development across a range of geographic, historical, political and economic contexts. The conference will also examine ways in which local and global issues place limits on sustainable urban development, and identify mechanisms that could or ought to be put in place to improve the local and global governance of urban spaces. Here are following six thematic areas during two days conference.

A) Development, Equality, and Inclusivity

The United Nations (UN) Sustainable Development Goals (SDGs), adopted in 2015, highlight the necessity for inclusive and sustainable development, particularly Goal 10: "Reducing inequality within and among countries." Inequality ranges from income inequality to disparities in access to health and education. Global income disparity is becoming increasingly acute; in

2015 the wealth of the sixty-two richest individuals in the world was equal to that of half of the world's population. Inequality of opportunity also contributes to disparities in areas where mobility and access to services are limited.

Discrimination is a form of exclusion and exacerbates inequality. Discrimination on the basis of group membership -- such as sex, race, disability, sexual orientation, religion, belief, or age -- occurs around the world, where these groups often face prejudice and even violence. Achieving gender equality and empowerment for women and girls is an important facet of Canada's foreign policy, as women's employment and poverty-reduction benefits health, educational rates, and overall economic development. Access to education is key to providing women and girls with the tools necessary to actively participate in the public sphere. To address issues of inequality, it is important to understand the degree to which it is experienced and provide supports that enable equal relations and promote inclusivity of diverse populations.

Sub-questions:

- What is the difference between inequality of opportunity and inequality of outcome, which measure best contributes to promoting inclusive development?
- How does sustainable urban development relate to gender equality and equal access to opportunities?
- What tools and skills can we provide women across the world to promote inclusive urban development?
- How should we examine/assess inequality in various regions across the world? What factors need to be addressed in order to understand inequality in a particular region?
- What forms of governance best promote inclusivity?

B) Urban Land Use, Sustainable Development and 'Ecological Civilization'

Urbanization is the process of rural population concentration into cities and towns, the trend of human social development, and an important symbol of national modernization. In the process of urbanization, it is necessary to carry out land development, which will lead to the expansion of urban and the increase of construction land. At the same time, it will also bring a series of ecological problems, such as the disorderly development of construction land, the occupation of high-quality cultivated land by construction land, land degradation and so on.
How to conform to the law of nature to develop social economy, to achieve harmonious coexistence between man and nature, and to achieve ecological balance, tests everyone's wisdom. How to solve the problems of land use in the process of urbanization and find out the countermeasures to promote the sustainable development of cities?

Sub-questions:

- How can we reasonably plan the land space and realize the sustainable development of cities in the process of urbanization?
- How to monitor the ecological condition of land use and Land use ecosystem services so as to realize the sustainable development of urban ecosystem?
- In the process of urban expansion, how to delimit the baseline of urban ecological environment security and maintain national or regional ecological security and sustainable development?
- How to effectively play the basic role of market in allocating land resources, fully realize the value of land assets and improve the efficiency of land resources utilization?
- Through engineering and biology technology, how to optimize land use pattern, rebuild, restore and enhance the ecological service function of land use, and ensure the safety of water, air, biology and ecology?

C) Climate Change and Adaptation of the Built Environment

In light of Climate Change trends projections and all the accompanying negative effects that possible impacts will bring, urgent actions are recommended by the most notable specialists of the world. There are two main lines of measures that can be implemented in the built environment to tackle issues. The first line consists of measures, designed to prevent the further rise of greenhouse gas emissions and therefore the worsening of Climate Change effects. These are measures such as the conversion to renewable sources of energy production, construction and promotion of mass public transport systems, promotion of cycling and walking as the means of urban mobility and construction of the required accompanying infrastructure, construction of energy and water efficient housing, etc. The second line of measures consists of measures designed adapt to those climate change impacts that we can expect. These are measures such as the construction of enhanced drainage in case of severe flooding events, rainwater-collection facilities in case of severe draught, disaster management centres, etc. How could the built environment be designed in order to be more resilient / adaptive to climate change and more efficient and sustainable? How could we reduce the carbon footprint of urban areas?

Sub-questions:

- What are the best and promising policies, rules and regulations, and practices fostering resilience of communities and build environment at local and national levels?
- How could developing countries avoid making the same past mistakes as the now developed world had made?
- How could urban mobility be transformed in order to be efficient and less polluting?
- How could scientific research, policy making, and construction skills be streamlined to increase people resilience to climate change in urban landscapes and human settlements?
- How could urban areas in the developing countries gain electricity without the use of fossil fuels?

D) Smart Technologies and Urban Intelligence

Emerging technologies such as geospatial technology, the Internet of Things, and artificial intelligence are driving cities to become smarter. A smart city aims to achieve sustainable urban development with urban intelligence, using information and communication technologies to optimize the efficiency of city operations and services and to connect with residents. Digital technology is already a basic part of city infrastructure, used for the deployment of new tools serving a Smart and Sustainable city. For example: smart monitoring technology is increasingly being used to investigate and address environmental concerns such as climate change and air pollution, the growing presence of sensors (Internet of Things) is widely used to collect data to build smart networks to improve public safety, and smart traffic management is employed to monitor and analyze real-time traffic to optimize travel patterns and to support decision-making. Technological literacy is crucial to turn a city into a connected, sustainable and resilient smart city, however there remain challenging questions in using urban intelligence in the initiatives to develop a smart city.

Sub-questions:

- Cyber-physical infrastructure addresses fundamental problems that involve data collection, dynamic resource allocation, real-time decision making, safety, and security, with emphasis on a balanced understanding of both physical and "cyber" components. How can a robust and responsive sensor network be developed to create the information infrastructure required for the inception of a smart city?
- What methods and tools for data-intensive computing and large-scale data management and analysis, such as Data Mining, Machine Learning, Database Management Systems, Data Fusion and Summarization, Spatial and Spatio-temporal Data Analysis, can be applied to monitor urban dynamics in Smart Cities?
- How can a smart urban plan for an environmentally sustainable city be designed and implemented by using and modeling interactions of humans, plants, animals, physical processes, urban infrastructure, and ecosystems?

E) Reforming the Informal Settlement

Informal settlements (a.k.a., VICs, slums, shantytowns, bidonvilles, etc.) are among the most challenging phenomena facing rapidly urbanizing areas. Africa has inherited colonial segregated planning traditions that are socio-economically exclusive, resulting in cement cities and slums. African cities present many notable differences from those in China. By far the most visible is the presence of slums: indicators of informality and thus a lack of planning control. The urban poor are obliged to occupy such settlements that are built in areas prone to flooding, landslides and other natural disasters — increasing the vulnerability of economically precarious residents. On the flip side, as cities expand and peripheral lands become increasingly central,

residents of established informal settlements face displacement due to rising land values and development pressures.

Rapid Chinese urban expansion was mainly the result of the movement of labour from rural to urban areas that followed the shift from agriculture to industry and services. African urbanization has also happened quickly, but with little industrialization and job creation. The informality of Africa's cities is an indication of insufficient investment in infrastructure. With no formal viable alternative, poor households often remake the city from below through 'informal' means. The informal economy provides livelihoods for many African urban dwellers and the social production by communities themselves delivers most of the housing. The New Urban Agenda (UN-Habitat 2016) obliges Governments to integrate and upgrade informal settlements into the city to improved levels of accessibility, safety, quality, inclusively and affordability. The approaches taken to heading off, retrofitting, integrating and/or redeveloping informal settlements have profound, long-term effects on the social, political, economic and public health of cities. This topic area invites presentations addressing the different contexts, strategies and best practices for the prevention, abatement, rehabilitation, and redevelopment of informal settlements. Among the issues at play are politics, financing, the accommodation of informal economic activity, access to services and infrastructure, flexibility and adaptability over time, the regularization of land tenure and title, enumeration and the formal identification of residents, and the use of housing as an economic instrument to pull people out of poverty.

Sub-questions:

- What might cities in Africa learn from China's approach to controlling informal settlements?
- Given the volatile nature of public financing, how can private sector and owner-builder's own investment be leveraged to address slum renewal and redevelopment? What are the advantages and pitfalls?
- Upgrading projects often benefit slum landlords, increases property values, while pricing out the urban poor. How can slum upgrading be made inclusive and affordable to the poor?
- How is slum redevelopment related to the larger challenge of providing stable, affordable housing?
- Should governments be encouraging/providing "transitional" housing? If so, what forms should it take and under what terms of reference should it be expected to operate?
- What can rapidly developing countries learn from the great social housing complexes of post-WWII Europe and North America?
- What role do informal settlements play in integrating rural-to-urban migrants into the economic and social life of cities?

F) Industrial Parks, Argo-processing Zones and Urban Transformation

When reviewing the history of development of the urban world, industrialization can be seen as an important factor in the push towards modernization and urbanization. Benefiting from the pioneering development during the Industrial Revolution, the developed countries in Europe, North America and North-East Asia have accomplished remarkable achievements in industrialization, which have led them to be more developed and leading in the modern world now. Represented by Economic & Technological Development Zones and High-Tech Industrial Development Zones, industrial parks in China have now also stimulated the rapid growth of the national economy, leading to large rises in the number of cities. Inspired by China's development zone patterns, more and more developing countries in Africa & Asia regard industrialization as a viable national development strategy used to achieve the urbanization goals of middle-income countries and the sustainable development of the economy. In fact, the development of industrial parks including agro-processing zones in some areas of Africa and Asia has transformed these previously undeveloped countries into newly industrialized nations. However, cities faced with the development of these parks are also faced with the problems that these parks give rise to, such as various forms of pollution, urban segregation, urban expansion, enhanced consumption of energy, etc. How should industrial parks and agro-processing zones be developed in order to promote sustainable urban development? How can urban and human settlements transformation be promoted through sustainable industrialization?

Sub-questions:

- How do developed countries plan on using the development of industrial parks to achieve high-quality industrial development and industrialization goals?
- What is the sustainable development path of industrial parks including agro-processing zones in developing countries that suits their national conditions?
- How should industrial parks be transformed and redeveloped to promote sustainable urbanization?
- How should China-Africa cooperation parks be planned to achieve sustainable development and help achieve the goals of poverty reduction, economic growth & urbanization in African countries?

CONFERENCE SCHEDULE OVERVIEW

The Third International High-Level Forum on Sustainable Urban Development

Venue: International Convention (Chengdu Century City), New International Convention and Exhibition Center (Chengdu Century City)

DAY 1: Monday, July 15, 2019

Morning
9:00 AM: Registration

Afternoon
1:00-1:30 PM: ICCCASU III Opening Ceremony
1:30-3:00 PM: Keynote Session
3:00-3:15 PM: Coffee Break
3:15-5:15 PM: Panel A: Development, Equality, and Inclusivity
5:15-5:30 PM: Book Launch
5:30-5:45 PM: Appreciation Ceremony

1:00-6:00 PM: Exhibition of Posters (IC Ballroom)

Evening:
6:00 PM: Dinner

DAY 2: Tuesday, July 16, 2019

Morning
9:00 AM: SUD3 Opening Ceremony and Keynote Speech

Afternoon
ICCCASU3 Panel Sessions (see Panel Details)

Venue & Time	IC Ballroom	Chenghua Hall
1:00-2:30 PM	Panel B1	Panel C
2:30-3:30 PM	Panel B2	Panel D
3:30-4:00 PM: Coffee Break		
4:00-5:00 PM	Panel B3	Panel E
5:00-6:00 PM	Panel B4	Panel F

1:00-6:00 PM: Exhibition of Posters (IC Ballroom)

Evening
6:00-8:00 PM: Conference Gala: Night of Chengdu

DAY 3: Wednesday, July 17, 2019

Field Trips/Visits

Participants depart from Chengdu

PANEL DETAILS

DAY 1: Monday, July 15, 2019

1:00-1:30 PM: ICCCASU III Opening Ceremony
Venue: **IC Ballroom**

Chairs / Moderators:
Cain, Allan, Director, Development Workshop, Angola/ Former ICCCASU Vice-President
Mundele, Tonton, Global Affairs Canada, Canada/ ICCCASU Academic Chair

- **Xie, Ruiwu,** Executive Deputy Mayor, Chengdu Municipality Government, China
- **Qiu, Aijun,** Deputy Director General, China Center for Urban Development
- **David, Jeff**, Consul General, Consulate General of Canada in Chongqing
- **Head,** Cameroon Official Delegation
- **Badiane, Alioune,** ICCCASU Honorary President
- **Tuts, Rafael**, ICCCASU Co-President/Representative of UN-Habitat
- **Cao, Huhua,** ICCCASU Co-President//Representative of University of Ottawa

1:30-3:00 PM: Keynote Session
Venue: **IC Ballroom**

Chairs / Moderators:
Badiane, Alioune, TUTTA President, Senegal/ ICCCASU Honorary President
Zhang, Xiaoling, Chief Engineer of China Land Surveying and Planning Institute

- **Tuts, Rafael**, Director of Programme Division, UN-Habitat & ICCCASU Co-President
- **Fu, Bojie,** Member of Chinese Academy of Science, China
- **Berridge, Joe,** Urban Planner/Partner, Urban Strategies Inc., Canada

3:15-5:15 PM: Thematic Area A: Development, Equality, and Inclusivity

Coordinators:
Mwai, Angela, UN-Habitat, Kenya
Xiao, Qiong, Southeast Minzu University, China

Panel A1: Inclusive Urban Development & Engagement of Women and Youth

Panel Chair: **Yemeru, Edlam,** UNECA, Ethiopia
Gianni, Benjamin, Carleton University, Canada
Venue & Time: **IC Ballroom**, from 3:15pm to 4:15pm

Ngomsi, Claude *Balagizi Asipingwe*, Joel	UN-Habitat, Kenya	Hasten Sustainable Urban Development in Africa: The Inclusive Urban Renewal Approach
Siyam, Sylvie ***Akoa***, Philippe Camille ***Menye Me Noah***, Fabrice	FEICOM, Cameroon	Measuring Local Development to Ensure Equality, Inclusivity and Development

Kebede, Getahun Fenta	Addis Ababa University, Ethiopia	Youth Entrepreneurship and the Promise of Inclusive Urban Development in Ethiopia
Cain, Allan	Development Workshop, Angola	Women's Tenure Rights and Land Reform in Angola

Panel A2: Urban Transformation, Governance & Cultural Heritage

Panel Chair: **Zander, Patricia**, University of Strasbourg, France
Akoa, Philippe, FECOM, Cameroon
Venue & Time: **IC Ballroom**, from 4:15pm to 5:15pm

Noubouwo, Antoine	City of Gatineau, Canada	Municipal Governance and Innovation: Case Study to Improve the Citizen Experience in Quebec, Canada
Sant'Anna, Marcus *Zhou*, Wuzhong	Federal University of Viçosa, Brazil Shanghai Jiao Tong University, China	Greens Urban Spaces in Shanghai and the Role of ICT's in User Behaviour
Wilczak, Jessica	University of Lausanne, Switzerland	From Collective to Community: Farmers-Turned-Citizens as Community Builders in Peri-Urban of Chengdu
Xiao, Qiong	Southwest Minzu University, China	On Spatial Formation Mechanism and Development of Tibetan Commercial District of Chengdu City

5:15-5:30 PM: Book Launch
Venue: **IC Ballroom**

Chairs/ Moderators:
Yang, Rong, Inter-Regional Advisor, UN-Habitat & ICCCASU Vice-President
Zacharias, John, Chair Professor, Peking University, China// Former ICCCASU Vice-President

Net Zero Carbon Village Planning Guidelines for the Yangtze River Delta Region in China
- **Wu, Jiang**, Vice-President, Tongji University, China

Perfect City: An Urban Fixer's Global Search for Magic in the Modern Metropolis
- Berridge, Joe, **Urban Planner/Partner, Urban Strategies INC, Canada**

5:30-5:45 PM: Appreciation Ceremony
Venue: **IC Ballroom**

Chairs / Moderators:
Cishahayo, Jean Marie, ICCCASU Chair for External Relations and Coordination, Canada

DAY 2: Tuesday, July 16, 2019

Thematic Area B: Urban Land Use, Sustainable Development and 'Ecological Civilization'

Coordinators:
Guo, Xudong, China Land Surveying and Planning Institute, China
Sietchiping, Remy, UN-Habitat, Kenya

Panel B1: Urban Sprawl and Challenges to City Development

Panel Chair: **Zacharias, John**, Peking University, China
Venue & Time: **IC Ballroom**, from 1:00pm to 2:30pm

Li, XiaoJiang	China Academy of Urban Planning and Design, China	New Features of the Urbanization Tends in China
Yue, Wenze	Zhejiang University, China	Monitoring Urban Land Sprawl for China Mega-Cities and Policy Implication
Zhao, Dan *Yang*, Bin	Beijing Municipal Institute of Urban Planning and Design, China	Research on Urban Resilience Planning System Based on Risk Assessment and Resilience Evaluation: A Case Study of Beijing
Han, Ruibo	University of Maryland, United States	Urban Sprawl from another Perspective: Interpreting Seattle's 3D Landscape with LIDAR
Chen, Yiping *Peng*, Lihong *Yu*, Ang	Xiamen University, Xiamen, China	Breaking the "Small Island Inertia"： Promoting Regional Sustainable Development through Synergetic Cooperation
Zeng, Jue	China Land Surveying and Planning Institute	Design and Development of Field Survey and Verification System Based on Internet+

Panel B2: Land Use and Questions of Sustainability

Panel Chair: **Li, XiaoJiang**, China Academy of Urban Planning and Design, China
Venue & Time: **IC Ballroom**, from 2:30pm to 3:30pm

Liu, Shouying	Renmin University of China	Cities without Slums? China's Land Regime and Dual-track Urbanization
Guo, Xudong ***Chen***, Yuqi ***Yu,*** Xiao	China Land Surveying and Planning Institute	Spatiotemporal Patterns and Characteristics of Construction Land Change in China during 2009-2017
Mosha, Aloysius	Ba Isago University, Gaborone, Botswana	Access to Land in Urban and Rural Areas of Botswana: The Issue of Inclusivity
Han, Lu	Zhejiang University of Finance & Economics, China	Land Misallocation and Productivity Differences between Manufacturing and Services in High-tech Industry

Panel B3: City Development and Urban Rehabilitation

Panel Chair: **Liu, Shouying**, Renmin University of China, China
Venue & Time: **IC Ballroom**, from 4:00pm to 5:00pm

Ishenda, Doris	Hohai University, China	An Assessment on Management of Capital City Relocation and Rehabilitation: The Case Study of Tanzania
Togolo, Jean Pierre	University of Yaoundé I, Cameroon	The Stakes of a Transformed Colonial Heritage in Yaounde, Cameroon
Covo, David *Davies*, Howard	McGill University, Canada	Urban Rehabilitation in Shanghai: Canadian Students' Perspective
Wang, Hong	Shanghai University, China	Toward More Sustainable High-Rise Building: A Case of Shanghai Center

Kenfack Zankia, Winnie Audrey	LTC & Partners (Architecture Firm), Cameroon	The Future African Market: A Mall in Yaoundé between Legacy, Trend and Modernity

Panel B4: Building Infrastructure and Environmental Protection

Panel Chairs: **Mosha, Aloysius**, Ba Isago University, Botswana
Wu, Wei, Nanjing Agricultural University, China
Venue & Time: **IC Ballroom**, from 5:00pm to 6:15pm

Zacharias, John	Peking University, China	Urban Development Outcomes of High-Speed Rail Development
Huang, Zhengli	University of Sheffield, United Kingdom	To Get Rich, Build a Road First? Infrastructure and Urban Development in Africa
Li, Huanqing	Research Center for the Urban Underground Space, Canada	Deep Shanghai Project: A Resilient Strategy for Infrastructure Integration
Omwamba, John ***Sietchiping***, Remy *Mangoua*, Frederic	UN-Habitat, Kenya	City-Airport Transport Corridors in Africa; Bridging the Nexus between Aviation and Urbanization for Sustainable Development
Chumbow, Beban Sammy	Academy of Sciences, Cameroon	Participatory Development in Rural Urbanisation in Cameroon

Thematic Area C: Climate Change and Adaptation of the Built Environment

Coordinators:
Ngomsi, Claude, UN-Habitat, Kenya
Li, Yangfan, Xiamen University, China

Panel C: Rapid Urbanization and Climate Change

Panel Chairs: **Chumbow, Beban Sammy**, Academy of Sciences, Cameroon
Amanibeni, Majid, Southwest Jiaotong University, China
Venue & Time: **Chenghua Hall**, from 1:00pm to 2:30pm

Li, Yangfan	Xiamen University, China	Urban Resilience: A Critical Nexus between Climate Change and Rapid Urbanization
Amanibeni, Majid *Zhang*, Biao *Xie*, Gao-Di	Southwest Jiaotong University, China Chinese Academy of Sciences	Impacts of Urban Green Space's Composition and Configuration on its Cooling Effect: A Case Study from Beijing, China
Wu, Wei *Abiyot*, Legesse	Nanjing Agricultural University, China Dilla University, Ethiopia	Study of Urbanization, Ecosystem Services Alteration and Human Wellbeing in the Great Rift Valley Region of Eastern Africa; a Perspective from Land Use/Land Cover Dynamics
Ren, Zhibin	Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences	Changes in Spatiotemporal Patterns of Urban Forest and its above Ground Carbon Storage: Implication for Urban CO2 Emissions Mitigation under China's Rapid Urban Expansion and Greening

Zhang, Jingxiao	Chang'an University, China	Research on the Influence of Emission Trading System on the Green Innovation Efficiency of Enterprises: An Empirical Analysis Based on Double Difference Method

Thematic Area D: Smart Technologies and Urban Intelligence

Coordinators:
Ruibo Han, University of Maryland, United States
Michel Tchotsoua, University of Ngoundere, Cameroon

Panel D: Smart Cities: Theory and Application

Panel Chairs: **Nahiduzzaman, Kh Md,** University of British Columbia, Canada
Zhao, Dan, Beijing Municipal Institute of Urban and Design, China
Venue & Time: **Chenghua Hall**, from 2:30pm to 3:30pm

Tchinda, Paul Emile	Urban and Rural Land Development and Equipment Authority (MAETUR), Cameroon	The Paradox of Security Planning in Sub-Saharan Africa: Challenges and Perspectives of the Implementation of Smart Technology Systems
Zhao, Yawei *Eliot*, Tretter	University of Calgary, Canada	Bike-Sharing in the Smart City Era: Post-Automobility in Canada and China
Tchotsoua, Michel	University of Ngaoundere, Cameroon	To Build Smart Cities: What Tools for Sub-Saharan Africa? Answers Based on the Ngaoundéré GIS Data Base, Cameroon
Nahiduzzaman, Kh Md	University of British Columbia, Canada	Urban Transformation and Smart City: A Path-Dependent Analysis

Thematic Area E: Reforming the Informal Settlement

Coordinators:
Gianni, Benjamin, Carleton University, Canada
Cain, Allan, Development Workshop, Angola

Panel E: Slums, Musseques and Urban Villages: Different Contexts/Different Strategies

Panel Chairs: **Wilczak, Jessica**, University of Lausanne, Switzerland
Noubouwo, Antoine, City of Gatineau, Canada
Venue & Time: **Chenghua Hall**, from 4:00pm to 5:00pm

Anderson, David ***Atias***, Etai	Carleton University, Canada	Informality Meets Formality: Luanda's Urban Transformation
Zhao, Shengbo *Wu*, Huijun	Southeast University, China Hunan University, China	Reflections from Industrial Perspective on the Transformation of Urban Villages in China: An Empirical Study of Jiangwanying in Hefei City
Guo, Xiangmin ***Yan***, Xiaona	Harbin Institute of Technology, China	Evaluation on Urban Renewal Public Policy Based on S-CAD Method: Taking the Illegal Buildings Governance Implementing Regulations in the Urban Village of Shenzhen as an Example

Onatu, George	University of Johannesburg, South Africa	A New Approach to Human Settlements Development in South Africa: Mixed Income Housing Development Framework

Thematic Area F: Industrial Parks, Agro-Processing Zones and Urban Transformation

Coordinators:
Wang, Xingping, Southeast University, China
Ogra Aurobindo, University of Johannesburg, South Africa

Panel F: Industrial Park Industrial, Agglomerations and National Development Planning

Panel Chair**: Yemeru, Edlam,** United Nations Economic Commission for Africa, Ethiopia
Venue & Time: **Chenghua Hall**, from 5:00pm to 6:15pm

Yemeru, Edlam	United Nations Economic Commission for Africa, Ethiopia	Urbanization and National Development Planning
Yan, Yiran ***Wang***, Xingping	Southeast University, China	Research on the Spatial and Temporal Differentiation of Industrial Agglomeration and Urbanization Coupled Coordination in Africa
Ogra, Aurobindo ***Wang***, Xingping *Aigbavboa*, Clinton ***Liu***, Kai *Ndebele*, Robert	University of Johannesburg, South Africa Southeast University, China	Exploratory Analysis of Special Economic Zones and Industrial Development Zones in South Africa
Danja, Isah Ibrahim ***Wang***, Xingping	Southeast University, China	The Role of Special Economic Zones in Nigeria's Urban Transformation
Xu, Jiabo ***Wang***, Xingping	Southeast University, China	Cooperation or Capital? Sino-African Special Economic Zones as both Government Programmes and Business Investments
Chen, Xiao ***Wang***, Xingping	Southeast University, China	The Inspiration Effect of the Policies and Regulations of Jiangsu Industrial Park on the Development of Ethiopian Industrial Park
Belay, Tegegne	Addis Ababa University, Ethiopia	Industrial Parks, Agro Processing Zones and Urbanization trajectory: The Case of Ethiopia
Liu, Kai ***Wang***, Xingping	Southeast University, China	Research on the Present Situation and Social Effects of Ethiopia's Industrial Park Construction

Panel G: Exhibition of Posters

Exhibition Time:
Monday & Tuesday, July 15-16, 2019

Panel Chairs: **Liu, Kai,** Southeast University, China
Guan, Haotian, University of Ottawa, Canada
Venue & Time: **IC Ballroom**, from 1:00pm to 6:00pm

Anderson, David	Carleton University, Canada	Informality Meets Formality: Luanda's Urban Transformation

Atias, Etai	Carleton University, Canada	Vernacular Re-Urbanization: Morphological Exploration of Redeveloping Informal Settlements in Sub-Saharan Africa
Beaulieu, Antoine	Université Laval, Canada	Rural-to-Urban Migration, a Key Adaptation Strategy in the Face of Globalized Agriculture: The Case of Vietnam
Dan, Zhen *Guo*, Aiqing	Hebei GEO University, Shijiazhuang City, China	Research on land intensive use evaluation in Xiong'an New Area
Han, R.B. ***Cao***, Huhua ***Liu,*** Ziwei	University of Maryland, United States University of Ottawa, Canada	Studying the Urban Hierarchical Pattern and Spatial Structure of China Using A Synthesized Gravity Model
Ji, Lin *Yu*, Xiaoyi *Sun*, Zheng	School of Architecture, Southeast University, China	Strategic Planning and Conceptual Design of Eastern New City in Ethiopia
Li, Xiaolong	Zhejiang University, China	Research on Urban Functional Area and Mixing Degree Recognition Based on POI: Taking Chongqing as an Example
Liu, Ziwei ***Cao***, Huhua	University of Ottawa, Canada	Spatio-Temporal Urban Social Landscape Transformation in pre-New-Urbanization era of Tianjin, China
Lyu, Chunyan ***Wang***, Xiaofan ***Hao***, Jikun	China Land Surveying and Planning Institute; Hebei Institute of Land Resources Utilization and Planning, Shijiazhuang, China	Analysis on Land Ecological Status of Yangtze River Delta Urban Agglomeration
Ma, Hui *Gao*, Song ***Cao***, Huhua	University of Ottawa, Canada Yunnan University, China	Local Traditional Knowledge and its Urban Context: A Case Study of Bai Ethnic Minority in Dali, China
Ma, Ling	University of Toronto, Canada	Intensive Planning of Land Value Increment and Urban Growth Space along Pan-Asia Railway (Laos Section)
Ma, Sicong ***Kang***, Yifan	University of Ottawa, Canada	The Effects of Trade Globalization on China's Urbanization and Carbon-Dioxide Emission
Mawenda, John	Hokkaido University, Japan	An Analysis of Urban Land Use/ Land Cover Change using Remote Sensing Data in Blantyre City, Southern Malawi
Nuness, Alice	Eduardo Mondlane University, Mozambique	Analysis of Social Capital in the Municipality of Inhambane
Qian, Chenli *Zhang*, Fan *Li*, Na	School of Architecture, Southeast University, China	Strategic Planning and Conceptual Design of Eastern New City in Ethiopia
Qin, Peng	Qingdao Agriculture University, China	The Revolution of Wetland Landscape Disturbance in Jiaozhou Gulf from 1980 to 2017
Rosmadi, Amalia *Zhou*, Wuzhong	Shanghai Jiaotong University, China	Gamification of Mobile Application in Raising Eco-Awareness amongst Youth in China
Wang, Huaming	Xi'an Jiaotong University, China	Correlation Between Block Layout and Wind Environment

Wang, Qian ***Li***, Jinlu *Wang*, Lin *Li*, Zhe *Hao*, Jikun	Hebei Institute of Land Resources Utilization and Planning, Shijiazhuang, China	Reform of Innovative Land Acquisition System Integrated Urban and Rural Development
Wu, Yaojun	Shanghai Jiaotong University, China	Social Sustainability of Urban Regeneration in Historic Community: Case of Suzhou Pingjiang Road
Xue, Honggang	Lanzhou Jiaotong University, Lanzhou, China	An Analysis on the Environment Renovation of the Villages Street in City from the Perspective of Cultural Memory: Take Yangming Lane, An'ning District, Lanzhou City as an Example
Zhang, Dongye *Ma*, Junwei *Wang*, Nan *Yang*, Po-Yu	School of Architecture, Southeast University, China	Strategic Planning and Conceptual Design of Eastern New City in Ethiopia

PAPER ABSTRACTS (alphabetical order)

Abdullahi, Sharmaarke
Urban Economy Branch, UN-Habitat, Nairobi, Kenya
Registration Code: R9CKG

Achieving Sustainable Urbanisation by Empowering Young Women and Men

Almost half of the total global population is under the age of 25 and around 1.8 billion people are between the ages of 18 and 24. The vast majority of these youth live in urbanized areas, especially in the cities of the developing world that account for over 90% of the world's urban growth. With the adoption of the 2030 Agenda for Sustainable Development and the New Urban Agenda, 2019 is the seminal year on the road to achieving sustainable urban development. If sustainable urban development is the foundation for a sustainable future, young people are at the forefront of this collective endeavor. The UN system embraces youth as a positive force for transformative change. Empowering youth to become agents of change within cities has the power to transform youth into a positive and productive driver for the overall national socio-economic development. Ad-hoc strategies and innovative solutions that account for larger youth populations living in and migrating to urban areas are necessary to enhance young people's participation in the creation of sustainable cities. At the same time, addressing socio-economic barriers, reducing social isolation of neighborhoods and communities, and allowing youth to access opportunities can help cities become more inclusive. In order to promote sustainable urban development and address the root causes of poverty and inequality, urban regulations and policies need to be reflective of the realities affecting young people.

Amanibeni, Majid
Southwest Jiaotong University, Chengdu, China
Zhang, Biao
Xie, Gao-Di
Institute of Geographical Sciences and Natural Resources Research,
Chinese Academy of Science, Beijing, China
Registration Code: WGVGI

Impacts of Urban Green Space's Composition and Configuration on its Cooling Effect: A Case Study from Beijing, China

Urban green space has been considered as an ecological measure to mitigate urban heat islands (UHI) through their cooling effect. However, construction of green spaces is under increased pressure in response to rapid urbanization. Thus, it is necessary to find the optimal strategies to maximize the cooling effect. The current study has focused on both the composition and configuration of green spaces in an urban park and its surrounding area in Beijing, China, using various datasets. Firstly, the impact of green space composition of the park including trees, grass

and waterbodies on the microclimate was observed. Secondly, a series of field measurements were conducted to monitor the spatial patterns of the ambient air temperature (AAT) in the surrounding areas of the same park. Thirdly, the 15 year spatial-temporal changes of both composition and configuration of green space on the cooling effect were studied using remotely sensed data. The results showed that cluster trees with short ground vegetation possessed more remarkable cooling effect than cluster trees with no ground vegetation, single trees, grass and water bodies. Also, it is likely that locating water bodies in the area which have more possible air flow could be effective for increasing the cooling effect. Furthermore, the distance to the park, the green coverage ratio, and connectivity index of green spaces are important variables affecting AAT and LST. The results reveal the importance of green space planning, design and plant selection for maximizing the cooling effect.

Anderson, David
Carleton University, Ottawa, Canada
Registration Code: GCCV6

Informality Meets Formality: Luanda's Urban Transformation

Global urbanization is occurring at an unprecedented rate. While the West is mostly urbanized, the majority of urban growth in the upcoming decades will occur in Africa and Asia. In Sub-Saharan Africa, where 72% of urban dwellers already live in informal settlements, it is crucial that continued urbanization be managed with effective urban planning. In Luanda, Angola - designed for a population of 500 000, home to 6.5 million and set to accommodate 13 million by 2030 - the consequences of rapid, unplanned urban growth are already acute. Over 40 years of conflict have pushed people from rural to urban areas. Most residents of Luanda lack basic services and title to their properties, most of which are self-built, one-story structures. In the absence of effective public transportation, the city is clogged with cars and roads are in awful shape. Informed by a range of local stakeholders, "Informality Meets Formality" offers an architectural response to address Luanda's extensive slums. Focusing on the transition from lower- to middle-class households, prototypes for low-rise, higher-density housing were developed to accommodate the evolving needs of individuals and families (e.g., flexible unit layouts, shared public space, self-building, direct street access, reduced common circulation, etc.) Drawing on case studies, built projects, and failed attempts of social housing in Luanda and elsewhere, the project provides an economically and socially sustainable roadmap for the phased redevelopment of Luanda's Cazenga district.

Atias, Etai
Carleton University, Ottawa, Canada
Registration Code: MU65Q

Vernacular Re-Urbanization: Morphological Exploration of Redeveloping Informal Settlements in Sub-Saharan Africa

The world is urbanizing at unprecedented rates, fundamentally, due to stark population shifts from rural to urban cities. These cities have become important drivers of development and poverty reduction in both areas, as they concentrate much of the national economic activity, while providing crucial links with rural areas, between cities, and even across international

borders. Rapid and unplanned urban growth threatens the world's sustainable development as a result of the necessary infrastructure not being properly developed or policies not being appropriately implemented to ensure that the benefits of city life are equitably shared. Such is the case with many Sub-Saharan African countries, namely Angola. A decade removed from civil war, Angola is reeling to respond to the growing informal population of Luanda-a city originally planned for half a million -currently hosting. Partnering up with local NGO's and research teams, extensive research has aided in examining the prospects of slums in areas of Luanda and methods of pursuing a redevelopment strategy. This dissertation addresses the current urban and social issues and what policies must be assimilated to ensure an appropriate re-urbanization proposal to uplift the current living conditions. A consideration for the socio-economic and transformative lifestyle of Angolans has helped cater a design proposal that addresses the hardships typically associated with shifting a population from informal settlements to improved urban conditions.

Aura, Tessy
Mwai, Angela
Gender Equality Unit, UN-Habitat, Nairobi, Kenya
Registration Code: ORZPY

Piloting the Human Rights Based Approach in Cambodia and Somalia

The purpose of this publication is to showcase the human rights-based approach as an intervention mechanism through a variety of different projects such as the WASH initiative in Cambodia, which supports the decision-making and performance management in water, sanitation, and hygiene sector while supporting decentralization efforts in the local governments. Projects like the MOSYC also mainstream human rights for youth leaders by ensuring HRBA through trainings of youth in identifying human rights violations and understanding the human rights framework, principles, and its application. This seeks to empower youth and support them by providing tools and access to information and resources to fight for their basic rights. Similarly, there are various projects such as the safe public spaces project in Palestine, that highlight the importance of mainstreaming human rights through the creation of inclusive public spaces which foster and promote international human rights treaties such as the international covenant on civil and political rights by creating public common space for people to gather. Through the implementation of these projects, the goal is to build institution and professional capacities of local communities, empower youth and vulnerable groups to realize and advocate for their basic rights, and to provide adequate housing and living standards for all.

Belay, Tegegne
Addis Ababa University, Addis Ababa, Ethiopia
Registration Code: U6QUX

Industrial Parks, Agro Processing Zones and Urbanization trajectory: The Case of Ethiopia

The aim of this paper is to investigate the implication of industrial parks and agro processing zones on the urbanization trajectory of Ethiopia. Ethiopia is vigorously pursuing an industrial

park policy with the aim of becoming a hub of light manufacturing and a lower-middle-income economy by 2025. As a result, it has established public and private industrial parks in major and secondary cities with the objective of promoting FDI, international trade, technological innovation, and employment. There is however limited knowledge on the implication of industrial parks on the urbanization trajectory. A number of linkages can be discerned between industrial parks and urban centers. These involve the provision of infrastructure, services and land; the stimulation of local economy with production and consumption spill over and the stimulation of region-wide city cluster type development in rural and urban areas. This paper investigates industrial parks and their effects on urban transformation in the country. More specifically it aims to: 1) Examine the design and implementation of industrial parks and agro processing zones in Ethiopia; 2) Identify the development induced by the IPs in the city in the form of demand for housing, creation of commercial activities and direct and indirect employment generation; 3) Assess the extent of coordination and planning between the IPs and the local municipality in order to embed the IPs into the local economy; 4)Examine the prospects of inducing a city-cluster development in the region.

Beaulieu, Antoine
Université Laval, Québec, Canada
Registration Code: FJPYS

Rural-to-Urban Migration, a Key Adaptation Strategy in the Face of Globalized Agriculture: The Case of Vietnam

Extreme poverty on a global scale persists, despite the many economic development efforts dedicated to fighting this problem. Agricultural intensification was supposedly encouraged to ensure food security for all, though several studies show its harmful nature in a context deeply marked by the search for growth and competitiveness, capitalism and productivism. Faced with challenges like overproduction and waste, many farmers around the world are struggling to safeguard the continuity of their agricultural production. In such contexts, farmers are showing different ways of coping with the strains of globalized agriculture, for example employment in urban and industrial areas, a fact linked to urban and industrial growth. Such actions enable the multigenerational consolidation of land, a process that can help ensure the endurance of rural income-generating activities capable of absorbing shocks. However, there remains a need to assess the capacity of small-scale agricultural productions, particularly those that have experienced or are currently experiencing accelerated integration into the global agricultural market since the 1990s, such as Vietnam, to adapt to the compression of globalized agriculture. A doctoral study in progress has, among others, an objective of contributing to the verification of the hypothesis according to which migration from agricultural areas to industrial and urban areas, constitutes a new key strategy for Vietnamese farmers to increase their ability to cope with the pressures of global agriculture.

Joe Berridge (Keynote speaker)
Urban Strategies INC, Toronto, Canada

Perfect Cities

Joe Berridge is a partner at Urban Strategies, an international urban planning and design consultancy based in Toronto. His work includes the master planning of city centres, waterfronts, airport cities and universities in Canada, the US, the UK, Europe, Singapore and China. Joe's recent book, *Perfect City*, draws on his experience working on similar challenges in different contexts. Why are some cities more capable and successful than others? What is the perfect mix of vibrant city centres, re-energised waterfronts, dynamic airport districts, effective universities, excellent public schools, parks and libraries? How does one make a "perfect city" happen?

Mr. Berridge will explore the many lessons cities provide with respect to economic development, growth management, transit systems, affordable housing, innovation, cultural infrastructure and the settling of immigrants. How do the responses to these issues vary between different governments, land ownership patterns, and urban development protocols? How do cities resolve the conflicts between top-down and bottom-up planning? Who does what best and how transferable are the experiences of one city/context to another, e.g., between Canada, China and Africa? Are all cities unique or do they share a common structural logic? Are the extraordinary achievements of many Asian cities replicable elsewhere? And can Toronto, the fastest growing city in the west, provide useful lessons in the biggest challenge facing all cities, namely, following Confucius' prescription to "Make local people happy and attract migrants from afar."

Cain, Allan
Development Workshop, Luanda, Angola
Registration Code: K6JUU

Women's Tenure Rights and Land Reform in Angola

Current Angolan municipalisation reforms present a unique opportunity to affect local practice on how community and individual land-holder tenure is administered and to protect women's equitable rights to land. Angola is a post-war country, with weak land tenure legislation and limited local government management capacity. The post-socialist inheritance has left the State as the formal owner of all land. In practice however there is an active informal land market, large scale-land grabs by urban elites, and increasing conflicts affecting communities, small holders and families, particularly those headed by women. Customary traditions are practiced in the various regions of the country do not respect women's rights of ownership and inheritance. More than 62 percent of the population live in informal settlements with insecure land tenure under the threat of forced evictions. Families living in poor communities affected by the expansion of cities and towns are particularly vulnerable. Of these, families lead by women are the most at risk. Securing rights to land and housing assets are important to livelihoods of women headed households by permitting access to financing that they require to grow their enterprises as well as upgrading their housing. The strategy to support women's rights to land should be linked with institutional capacity building for the new municipal administrations. It

is hoped that women's participation in municipal elected decision-making bodies will support efforts to strengthen their tenure rights.

Chen, Yiping
Peng, Lihong
Yu, Ang
Xiamen University, Xiamen, China
Registration Code: 3HPXO

Breaking the "Small Island Inertia": Promoting Regional Sustainable Development through Synergetic Cooperation

Rapid globalization and urbanization have made cooperation and common development a new normal for regional sustainable development. It is an important issue of regional sustainable development on how to transform the external consumption into the driving force of the internal development. The research focuses on the Xia-Zhang-Quan metropolitan area in Fujian Province, China, and uses a spatial gravity model, location quotient ratio (LQR), regional division of labor index (RD), similarity coefficient (S), and the coordinated development of industrial integration as the entry point. The results show that the isomorphism of industrial structure in the three cities is serious (S_{xq}=0.94, S_{xz}=0.96, S_{qz}=0.98), and the industrial structure convergence of the primary ($0.172 \leq RD \leq 0.415$) and tertiary industry ($0.300 \leq RD \leq 0.414$) is serious, while the second industry has a better division of labor ($1.030 \leq RD \leq 1.273$). The cooperation between Xiamen and Zhangzhou should be realized in the intra-industry and industrial chain division (LQR_{xz}=1.233), and further cooperation between Xiamen and Quanzhou should be achieved in the inter-industry division (LQR_{xq}=0.577). From the phenomenon analysis to the concrete development path summary, this paper aims to provide a feasible way for the special economic zone of Xiamen to break the "small island inertia", and provides a demonstration for the sustainable development of China's urban agglomerations on small-scale specific controllable research.

Chen, Xiao
Wang, Xingping
Southeast University, Nanjing, China
Registration Code: U15E8

The Inspiration Effect of the Policies and Regulations of Jiangsu Industrial Park on the Development of Ethiopian Industrial Park

In the development process of industrial parks, policies and regulations play an important role in promoting their development, and also function as important factors for the success of the industrial parks in China. As one of the first provinces in China to establish a national-level development zone in the earliest stage, Jiangsu has always been in a nationwide leading position in terms of the development of industrial parks, and consequently the "Jiangsu Model" featuring the unique integration of investment, planning, management and innovation. In Ethiopia, the rapid maturity of the parks are promoted by various laws and regulations on construction and investment. However, the parks have also encountered several problems. This paper conducts an analysis on the development of the industrial parks from the types, themes and function of

the regulations. Based on this, a comparable study would be performed on the background on the environment and development stage of China's and Ethiopia's parks to explore the reference effect of the "Jiangsu Model" on the "Ethiopia Model". Furthermore, suggestions for the innovation and improvement of the management system of the Ethiopian industrial parks would be suggested from the aspects of legislation of parks, management systems and platform construction. [Foundation]: Research on Development Model and Planning Guidance Mechanism of Jiangsu Overseas International Cooperation Parks（No. 17EYA001）

Chumbow, Beban Sammy
Cameroon Academy of Sciences, Yaoundé, Cameroon
Registration Code: 63RB9

Participatory Development in Rural Urbanisation in Cameroon

A major challenge of rapid urbanization in Africa is that besides planned urbanism, African cities also experience rapid, spontaneous, unplanned chaotic settlements that defy norms of smart cities and favour exponential growth from rural-urban migrations resulting in myriads of serious health, social and economic problems. One viable solution to avoid potentially explosive social tensions in urban centres is the urbanisation of rural communities by planned development and provision of basic amenities and job opportunities in rural communities to stem rural exodus. This paper examines rural urbanization efforts in rural municipalities in Cameroon under the 2004 law on decentralization with a focus on the implementation of the participatory development. It is shown that mobilization of the rural populations for inclusive participatory development faces enormous challenge of language of communication in the development enterprise, because the official languages (English and French) are not mastered by the masses of the rural population who (like most of Africa) speak mainly local languages. This leads to proposing a development communication paradigm for African rural urbanization based on the appropriation model (Chumbow, 2013) that guarantees the development and use of local languages in partnership with official languages to ensure appropriation of knowledge and technologies relevant to rural urbanization development. The paradigm guarantees the democratization of access to knowledge, thus ensuring inclusiveness.

Covo, David
Davies, Howard
McGill University, Montreal, Canada
Registration Code: H6CPJ

Urban Rehabilitation in Shanghai

This paper describes an exercise in urban rehabilitation in Shanghai that started in June 2018 with a collaboration between 3 parties: the McGill Global Studio (11 students and 2 professors from the Peter Guo-hua Fu School of Architecture, McGill University), an architect (KFS Architects, Shanghai) and a developer (Shenya Development Group, Shanghai). The site is a residential neighborhood in Shanghai's Yu Yuan Road district, an area characterized by a dense mix of residential typologies (including 4 Shikumen houses, an early 1930's block and a concentration of other 2-4 storey heritage buildings) along with a few light commercial and

institutional occupancies. In an intense 15-day charrette that started with site surveys and meetings with the developer and district regulators, students developed a detailed conceptual proposal calling for restoration of the original pedestrian and vehicular pathways, strategic renovation of the heritage buildings, and replacement of unlicensed interventions and other structures with a thoughtful insertion of higher density residential projects and new commercial, recreational and cultural facilities. A major objective was to assist the architect and developer by exploring strategies that challenged, without ignoring, elements of the regulatory framework in order to identify innovative and sustainable models for development. The work begun in China was completed in Montreal by students working under the supervision of Professor Howard Davies.

Dan, Zhen
Guo, Aiqing
Hebei GEO University, Shijiazhuang City, China
Registration Code: T3SQO

Research on Land Intensive Use Evaluation in Xiong'an New Area

At present, the construction of Xiong'an New Area is a millennium plan. National events and high-quality connotation development are the inherent requirements for the development and construction of new area. According to the land use situation and development plan of the new area, it is necessary to evaluate its intensive land use. This paper establishes an evaluation index system from the four criteria of land use degree, land use economic benefit, land use ecological benefit and land use sustainable level to comprehensively evaluate the intensive land use level of Xiong'an New Area. The evaluation results show that the overall level of land intensive use in Xiong'an New Area is not high, and the intensive use scores of Rongcheng County, Xiongxian County and Anxin County are respectively 0.6273, 0.4984, and 0.3181, which can tap huge potential. According to the land use situation and characteristics of the counties in Xiong'an New Area, the development countermeasures and suggestions for the future are pointed out in a targeted manner, which provides a reference for the construction and development of Xiong'an New Area.

Danja, Isah Ibrahim
Wang, Xingping
Southeast University, Nanjing, China
Registration Code: VWJ2Z

The Role of Special Economic Zones in Nigeria’s Urban Transformation

According to the United Nations (UN) projections, developing countries in Africa and Asia will have a majority of urban residents in the next 20-30 years. This brings a challenge to developing countries like Nigeria. In 2009, consultation was carried out between the Ministry of Commerce of China (MOFCOM), the World Bank Group (WGB) and the governments of Nigeria, Ethiopia, and Mauritius on learning from the Chinese experience on Special Economic Zones (SEZs) initiatives as well as exploring the prospect of Tripartite collaborations. It was agreed that all three stakeholders share similar objectives in promoting the development of SEZs to support Africa’s industrial development and export growth by manufacturing and other

investments from China as well as from domestic and other foreign investors. Since its introduction in 2009, the development of the SEZs in Nigeria has faced many challenges in the areas of Legal and Institutional Framework, Resettlement, Infrastructure (on-site and off-site), environmental, Management and Operational Know-how experience, and Government ownership and continuity. The paper shall aim to examine the role of Special Economic Zones (SEZs) in Nigeria's urban transformation. Reviewed literature will be used to identify and discuss some of the existing SEZs in Nigeria and the roles they will play in Nigeria's quest for urban and economic development. The result highlights some of the challenges and constraints faced by the SEZs in Nigeria.

Bojie Fu (Keynote speaker)
Member of Chinese Academy of Science
Distinguished professor at the State key Lab of Urban and Regional Ecology, Chinese Academy of Sciences

Eco-environmental Effects of Urbanization in China and the Exploration of "New Urbanization"

Urbanization is a key component of the social development of civilizations. In the throes of rapid urbanization, China is currently at a critical stage in its development. With some 656 recognized cities, China's urban population now exceeds 700 million with an urbanization level of only 52%. By 2030, China will have established 23 urban agglomerations with different functions.

Among the severe challenges facing Chinese cities during this ongoing process of urbanization are significant ecological and environmental degradation, disorganized patterns of urban expansion, and the inefficient use and distribution of infrastructure. Environmental problems are driven not only by the lack of capacity of urban infrastructure, but also the high volume of pollutants released into the environment. This study analyzes the so-called "new urbanization" and its difference from traditional models. The characteristics of New Urbanization include urban-rural integration, people-oriented design, production-city integration, economic intensity, ecological livability, and coordinated development. It is poised to play a strategic role in managing China's rapid urbanization.

Gianni, Benjamin
Carleton University, Ottawa, Canada
Registration Code: QGAE5

Towers on the Horizon: Transitional Housing and the Build-Out of Chinese Cities

This paper addresses two issues: the current blueprint for new residential neighborhoods in China and the concept of "transitional" housing for rural-to-urban migrants. In both cases it engages the form of communities and their longer-term sustainability as urban fabric. Urban expansion and transitional housing are related inasmuch as the bulk of those moving into cities in China in the next several decades will be unskilled rural migrants. As the physical framework in which social networks are formed, these new peri-urban neighborhoods are key to both the successful integration of rural-to-urban migrants and their longer-term social mobility. In most

parts of the world, rapid urbanization results in slums. China is different inasmuch as it stays largely ahead of the curve. Famous for its ghost cities, China is renowned for building housing in advance of new residents. This reflects one of the more positive legacies of a command economy coupled with a proactive, top-down approach on behalf of municipalities. It also reflects China's ability to manage the inflow of migrants through its Hukou system. Focused on the form of communities - and by extension the way space is distributed around buildings - the paper explores the suitability of high - rise ensembles to the demographic that many are built to serve. It also engages the question of cultural resonance and the imposition of architectural modernity, both for its symbolic value and for its expediency.

Gidado Dalibi, Salisu
HoHai University, Nanjing, China
Ali Kumo, Hassan
Muhammad Kabir
Abuja, Nigeria
Registration Code: GKKOL

Project Professionals Perspectives on Effective Delivery of Belt and Road Infrastructural Projects in Nigeria's Built Environment

Nigeria's recent inclusion in the belt and road initiative (BRI) is welcome within Nigeria's construction industry. Each BRI participating country has its priorities and Nigeria's purposes include bridging its infrastructural deficit as its population is growing rapidly. Such infrastructural development projects (IDPs) includes roads, railways lines, bridges, tunnels, ports, dams and water projects, power generation plants and distribution grids, information, and communication technology (ICT), etc. However, delivering such IDPs have not been smooth; they come with challenges from within and outside the project; frequent delays and abandonment thereby affecting all the stakeholders involved. Hence, the study aims to identify and assess the factors that impact and affect the effective delivery of IDPs in Nigeria's Built Environment from the project professionals' views and perspectives. The study adopts secondary and primary sources of data by putting more emphasis on Nigeria's cases. The results outline the impacts of various internal, external and project related factors that will have significant impacts on effective delivery of BRI infrastructural projects within Nigeria's built environment and the strategies that are needed to solve and overcome hindrance factors to ensure effective delivery of such projects. Key Words: BRI, Built environment, Development, Factors, Hindrances, Infrastructure, Nigeria, Project Professionals.

Guo, Xiangmin
Yan, Xiaona
Harbin Institute of Technology, Shenzhen, China
Registration Code: MIDRA

Evaluation on Urban Renewal Public Policy Based on S-CAD Method: Taking the Illegal Buildings Governance Implementing Regulations in the Urban Village of Shenzhen as an Example

The game between multi-stakeholders is an important problem that plagues current urban planning and development. Especially in the urban renewal areas where the confrontation of interests is more acute, public policy will touch on deeper interest patterns and often lead to strong social reactions. Therefore, it is of great significance to explore the use of appropriate decision analysis tools to pre-dissolve social risks in policy making. For this purpose, this study uses the S-CAD (Subjectivity-Consistency, Adequacy, Dependency) approach proposed by Canadian scholar Hok-Lin Leung, which has a clear rational logic and is easy to optimize and balance the demands of all stakeholders, to evaluate the new policy of illegal construction governance for the urban villages of Shenzhen. During the policy evaluation, S-CAD method is applied to consider the implementation effect (consistency), efficiency (adequacy) and feasibility (dependency) of the policy from the dominant viewpoint and related viewpoints. The contradictions and games between the multi-stakeholders such as the government, illegal building owners, and village collectives have been analyzed. The results and impacts of the implementation of the policy have been predicted, as well as the suggestions for modification and improvement. This research is expected to bring useful insights into scientific decisions about urban public policy.

Guo, Xudong
Chen, Yuqi
Xiao, Yu
China Land Surveying and Planning Institute, Beijing, China
Registration Code: GHPJR

Spatiotemporal Patterns and Characteristics of Construction Land Change in China during 2009-2017

The construction land scale and pattern change is not only an important theme of urbanization and industrialization, but also a key factor affecting the sustainable development of cities. By using the data of the 2nd National Land Use Survey in 2009 and its updated database from 2010 to 2017, this study analyzed the spatiotemporal patterns and characteristics of construction land during 2009-2017. The results indicated that: (1) in 2017, the construction land area in China was 39.57 million hectares; with 81.19% of it being urban, village, industrial and mining land. The transportation area accounted for 9.69%. (2) Between 2009-2017, the total amount of construction land expanded continually with the average annual increase of 0.51 million hectares. The increasing construction land mainly comes from cultivated land, forest land and grassland, with the proportion of 50.79%, 14.94% and 11.58 respectively. However, the increasing rate slowed down these years. (3) The construction land was mainly distributed in eastern and central areas. Between 2009-2017, the construction area in eastern and middle provinces increased rapidly, while the increasing rate was higher in western areas than other regions. (4) As to the internal structure changes of construction land in different provinces, the increased urban and village land area were mainly distributed in eastern and middle areas. The increased town area was mainly in the middle and western areas. The mining area was mainly increased in the middle, western and northeast areas.

Han, Lu
Zhejiang University of Finance & Economics, Hangzhou, China
Registration Code: ESGJR

Land Misallocation and Productivity Differences between Manufacturing and Services in High-tech Industry

In this paper, land misallocation and productivity differences are explored between manufacturing and services in high-tech industry by using the Cobb-Douglas production function model. The purpose of the study is to provide theoretical reference for optimizing land allocation in high-tech industries and providing differentiated allocation strategies of industrial resource elements. The results show that: 1) different sectors of high-tech industries depend on different investment of resource elements, and there are differences in TFP among different sectors. In general, the manufacturing industry mainly depends on capital investment and land investment, while the service industry mainly depends on labor investment. However, the TFP of the service industry is significantly higher than that of the manufacturing industry. 2) The land allocation between manufacturing and services in high-tech industries is insufficient and unbalanced, and there is land misallocation between manufacturing and services in high-tech industry. 3) Land misallocation has different effects between manufacturing and services in high-tech industry. The study concludes that the key to rectify the land misallocation of high-tech industry lies in how to balance the allocation of land among industries. It is suggested that the government should adjust the orientation of industrial structure, resource allocation among industries, scientific land use planning, and layout adjustment for high-tech industries.

Han, Ruibo
University of Maryland, College Park, United States
Registration Code: ZU0JW

Urban Sprawl from Another Perspective: Interpreting Seattle's 3D Landscape with Lidar

Landscape models have been widely used to study urban landscape patterns and urban dynamics. However, studies have been limited to surficial aspects to examine urban development patterns, and a vertical view of the urban landscape is often overlooked due to lack of data or a systematic quantitative model to depict the 3D dynamics. By incorporating a DTM model from Lidar data of Seattle, this paper develops a 3D Landscape Model to evaluate the urban growth of the region in both 2D and 3D perspectives. Socioeconomic variables are included in the model to interpret the surficial and vertical urban dynamics in the metropolitan area.

Huang, Zhengli
University of Sheffield, England
Registration Code: XQ16P

To Get Rich, Build a Road First? Infrastructure and Urban Development in Africa

China contributes to a large proportion of the infrastructure development in Africa. Yet behind the headlines there is still little research on who drives these projects forward, what their temporal horizons are, and how they reshape the territories and communities around them. It is very clear that an infrastructure-led development model is being transmitted through the engagement of competitive Chinese contractors in African infrastructure projects, but whether

the model will work in the new context remains a question. Most importantly, the formular of such a model is rarely explored in existing literature, leaving a huge gap between different understandings towards China's investment and efforts in Africa's infrastructure development. In this paper three projects in Uganda and Ethiopia are studied at both urban and regional level: the Light Rail Transit in Addis Ababa, the Djibouti-Addis SGR, and the expressway linking Kampala to Entebbe airport. These projects are highly significant because they showcased the missing links between the Chinese model of infrastructure-led urban development and the practices in Africa. The profit-seeking Chinese contractors themselves play a key role in driving infrastructural modalities, engaging opportunistically with African national governments whose agendas are inconsistent and malleable. The infrastructure-based local financial platform and the ownership of land as a government asset, key elements at play in the Chinese urban development model, are absent in the African context.

Kebede, Getahun
Addis Ababa University, Addis Ababa, Ethiopia
Registration Code: 6K462

Youth Entrepreneurship and the Promise of Inclusive Urban Development in Ethiopia

Ethiopia is one of rapidly urbanizing countries of the world. Rural-urban migration of the youth is a major force in the urbanization process. The capacity of urban centers to house the massive influx of migrants by providing employment opportunities is however limited. Consequently, the youth are pushed into self-employment in the informal sector. Though Ethiopia has witnessed rapid economic growth, the challenges posed by the growing population has increased urban inequality making the youth most vulnerable. To reverse this problem, the promotion of youth entrepreneurship programs has become an important policy agenda item. Entrepreneurship programs are however unable to reach a significant portion of unemployed youth and those working in the informal sector. This paper explores barriers that deter the youth from starting and running businesses. It has used a qualitative research approach. Data was collected using key-informant interviews and focus group discussions from four cities. The findings show that bottlenecks including lack of understanding the nature and demands of the youth; weaknesses in business organization and developing markets; institutional malaise and resource constraints; priority business areas set by the government; the involvement of many institutions; low levels of service capacity; business registration and licensing fees and taxes; corruption and socio-cultural constraints hinder the success of youth entrepreneurship programs and attaining inclusive urban development in Ethiopia.

Ishenda, Doris
HoHai University, Nanjing, China
Registration Code: C832G

An Assessment on Management of Capital City Relocation and Rehabilitation: The Case Study of the Capital City of Tanzania

Tanzania has recently moved its capital city from Dar-es-salaam to Dodoma. Looking at this problem from a global perspective; countries have relocated their capital cities whereby major policy considerations for justification have been centrality, national cohesion, avoiding

congestion of large cities and planning anew. Such projects have been creating a special purpose vehicle to steer the planning, financing and building. Laws have also been put in place. The purpose for this study is to understand and assess full operations of the capital systems, function analysis, rehabilitation approach and the management of all policies, planning, implementation, monitoring and compliance of the project. The general objective of this study is to develop knowledge that involves capital city relocation and rehabilitation and to ensure that the best model is used to make this process effective and efficient. The main problem discussed is the inconsistency of the whole process and how projects like these should follow a "one-systematic engineering approach" that means following specific steps in order to make sure that all important areas were covered. The methodology used will be non-probability sampling (Interviews, questionnaires and focus groups will be used to results from the "selected" stakeholders). Finally, the plan is to come up with a constructive practical model and develop a theory analysis framework to be adapted by others in order to ensure a "full run system" is generated to help Governments and any other stakeholder.

Kenfack Zankia, Winnie Audrey
LTC & partners (Architecture firm), Douala, Cameroon
Registration Code: Z29XY

The Future African Market: A Mall in Yaoundé between Legacy, Trend and Modernity

The theme « A mall in Yaoundé between legacy, trend and modernity » is an area of research on the future of African markets, regarding to the rapid population growth. The main objective was to understand which development models were to be adopted for urban markets. The answer to this question implies that one should take into consideration the different logics of existing designs and modern trends in order to generate the most adapted modern trade form for our future market areas. The mall is a consistent set of trade and leisure. It is designed to make the purchasing pleasant by guaranteeing the best possible conditions of security, hygiene and comfort that traditional markets nowadays can barely afford to offer. Integrating the concept of markets in a mall helped us to experiment the concept of flexibility in the project, which avoids the freezing of the usage by giving the possibility to later modify it. Other principles, notably the sustainability and the monumentality have been used as a basis for a real integration of the project in its urban context. The project of the mall so far presented reflects a capital city able to emphasize and promote the Cameroonian economy. Key words: mall, legacy, trend, modernity, market, trade, flexibility, sustainability, monumentality.

Kitio, Vincent
UN-Habitat, Nairobi, Kenya
Registration Code: 9MX5W

Sustainable Energy Transition in Cities

As the world struggles to address today's challenges of rapid urbanisation, increased poverty and the devastating effects of climate change, global efforts are required to enact the transition to sustainable energy and resources. Cities represent more than 70 per cent of global energy demand which also contributes to greenhouse gas emissions. Cities hold the solution to most of the challenges of the 21st Century, starting from adopting and implementing the sustainable

energy agenda. The current global share of renewable energy supply is 11 per cent. The diversity of renewable energy resources is vast, and research indicates a potential contribution of renewable energy to reach 60 per cent of total world energy supply by 2050, if the current trend of adopting renewables continues. For cities to become sustainable, the transition towards sustainable energy use will require major interventions in the following sectors:1- Urban planning, designing and implementation of densely, compact and accessible cities with plenty of green areas; 2- Designing clean, efficient and affordable public transportation options; 3- Designing new buildings with green building and resource efficient principles and retrofitting old buildings; 4- Generating energy from local clean energy sources; 5- Adopting efficient municipal waste management system with resource recovery; and 6- Promoting efficiency in the use of resources (energy and water) in commercial and industrial sectors as well as in the generation and transportation of energy.

Li, Amy Huanqing
Associated research Centers for the Urban Underground Space (ACUUS), Montreal, Canada
Registration Code: M7QPY

Deep Shanghai Project: A Resilient Strategy for Infrastructure Integration

Shanghai, as the most populated megacity, is facing challenges due to more frequent flooding occurrences, a five-times higher freight transport growth than rail transit passenger growth, and the controversial waste management issue. While shallow underground space in Shanghai city has been approaching its saturation degree, the use of Deep Underground Space (DUS) is under a forward-thinking planning initiative from 2016, aiming to scale up its infrastructure stock to meet future demand. Exploring deep infrastructure functions will also help to deal with industrial land scarcity and to generate consolidation effects with an infrastructure integration strategy. Emphasizing three priorities “Security, Resiliency and Ecology”, this article will start from addressing a “Depth-scape” planning concept based on vertical zoning and a development potential evaluation process, followed by discussing three functional schemes below 50 meters deep. Three categories of DUS spatial networks are presented, indicating benefits on service performance enhancement.

Li, Xiaolong
Zhejiang University, Hangzhou, China
Registration Code: K30SK

Research on Urban Functional Area and Mixing Degree Recognition Based on POI: Taking Chongqing as an Example

With the continuous advancement of global urbanization, urban development has entered a new era. The rapid development of information technology has made cities more intelligent, dynamic and efficient. Based on this background, the era of big data came into being, and urban development and planning disciplines are paying more and more attention to the application and research of emerging data technologies. The widely distributed POI data in urban space has important reference significance for urban spatial analysis due to its massive and accurate characteristics, and also provides a new perspective for urban land use and functional

identification evaluation. This paper uses Baidu map POI big data to take the core city of Chongqing as the research object. Based on the screening and classification of POI data, the "space-influence" binary weight calculation model is constructed to quantify the POI attribute. Combined with the street data, the area is divided to identify the main functions of each block. The functional mixture degree is calculated at the refined grid scale, and the analysis results are compared with the current situation. The feasibility of the research method is demonstrated, which has certain theoretical and practical value for urban spatial planning and policy formulation.

Li, Xiaojiang
China Academy of Urban Planning and Design, Beijing, China
Registration Code: ZMC53

New Features of the Urbanization Tends in China

New Features of the Urbanization Tends in China: 1) the overall urbanization is slowing down, and farmers disfavor moving to the city with their whole families; 2) the urbanization rate in the central and western regions is higher than that in the eastern regions, with a significant back flow of people, who moved from the central and western regions, and decrease of population inflow to the eastern regions; 3) the new urban population flows into the counties (cities), while the population growth in megacities is significantly reduced; 4) the newly-employed people in the country are dominated by college graduates instead of by migrant workers as in the past; 5) the employment and living mode for a large number of rural households in plains areas tends to be featured by “working in agriculture and industry concurrently”, “living in both urban and rural areas” and “commuting between commuting”; 6) the middle-income population grew rapidly, introducing new demands for urban space supply, and thus the more cases of “living in two cities” occurred. To cope with changes during urbanization, the status of space resources supply needs to be changed. 1) Follow the differences in supply and demand between the central, western and eastern regions and between the northern and southern regions. 2) Focus on a more equitable supply of resources for large, medium and small cities and county-level units. 3) Highlight a refined supply of space resources to guide the improvement of the stock spatial structure, and satisfy new demands of quality life. 4) Transform the model of urban development depending on land and finance to allocate fairly and reasonably lands for living, production and ecological purposes.

Li, Yangfan
Xiamen University, Xiamen, China
Registration Code: 9T1MG

Urban Resilience: A Critical Nexus between Climate Change and Rapid Urbanization

Humans are facing high risks in terms of extreme climate events and rapid urbanization, especially in coastal regions worldwide. Improving the urban resilience is one of the critical mechanisms to help people better adapt to climate change and rapid urbanization. This study proposes a critical nexus between climate change and rapid urbanization to enhance the urban ecological resilience in the coastal area. Our group explored the resilience mechanism of the coupled human-environment systems in some coastal regions; and we also applied the concept

of land-water-biodiversity nexus in Xiamen to explore the resilience mechanism in the typical coastal city. Most of the previous works focused on the urban-ecological system and did not combine climate change with rapid urbanization in the nexus perspective to realize the land-sea connection. A new framework of "climate change-rapid urbanization" nexus is established in this study highlighting the resilience by systematically integrating the water, land (soil), air (climate), biodiversity, and human components in the coastal rapid urbanization regions of China. Simultaneously, we apply the spatial systematics dynamics method to detect the complex multi-factor, multi-process and multi-scale nexus of the coupled human-earth system and to achieve sustainable development goals. The future study provides a scientific basis for enhancing the resilience and land-sea connection in the integrated coastal landscape (watershed, coast and offshore marine area) of China.

Liu, Kai
Wang, Xingping
Southeast University, Nanjing, China
Registration Code: K1IXU

Research on the Present Situation and Social Effects of Ethiopia's Industrial Park Construction

Since the establishment of the first industrial park in Ethiopia in 2007, more than 20 industrial parks have been planned and constructed in the whole country up to 2018, including the Eastern Industrial Park, Bole Lemi Industrial Park, Huajian International Light Industrial Park and the Hawassa Industrial Park. Due to the rapid development of industrial parks, Ethiopia's economy has developed rapidly, and the average growth rate of GDP has remained above 10%, far higher than the average growth rate of Africa in the same period, and the per capita GDP has also risen from $184 in 2006 to $754 in 2017; the industrial structure has been continuously upgraded and optimized, and the proportion of secondary industry in GDP has increased from 10.4% to 24.0%; Foreign direct investment also increased from $100 million in 2008 to $3 billion in 2016. At the same time, the construction of industrial parks has also promoted the progress of industrial technology and the increase of skilled workers. From the perspective of the garment and textile industry, which is the dominant industry in most industrial parks, Ethiopia's exports to the European Union and the United States totaled about $5 million worth of clothing in 2007. In 2016, this figure has increased to more than $70 million.

Liu Shouying
Renmin University of China, Beijing, China
Registration Code: 7UDFY

Cities without Slums? China's Land Regime and Dual-track Urbanization

Since the 1990s, China's urbanization has entered a channel of rapid development. The urbanization rate of resident population has increased from 26.41% in 1990 to 57.35% in 2016, with an average annual increase of 3.03%. Under the dualistic land system, China's urbanization shows obvious double-track characteristics: one track is that the government relies on compulsory low-cost land acquisition and dominance by the primary land market, which solves the capital source in the urbanization process and the provision of public goods, but has also led

to urban sprawl, inefficiency, structural imbalances, government finances and bank financial risks. On the other track, peasants spontaneously gather at the "urban-rural integration" or "village in the city," and collective organizations of peasants provide public services. This track leads to the spread of extra-legal places, the lack of basic public service provisions, unequal rights of foreigners and locals, and other problems of urban governance such as the concentration of public security incidents. Combined with China's dualistic system, this paper analyzes the characteristics and problems of government-led urbanization and peasants' spontaneous urbanization and puts forward some policy suggestions on how to reform the land system to achieve urbanization.

Lyu, Chunyan
Wang, Xiaofan
China Land Surveying and Planning Institute, Beijing, China
Hao, Jikun
Hebei Institute of Land Resources Utilization and Planning, Shijiazhuang, China
Registration Code: 808LX

Analysis on Land Ecological Status of Yangtze River Delta Urban Agglomeration

Land ecological status is an important aspect of sustainable utilization of land resources. With the continuous advancement of the construction of ecological civilization, the overall ecological environment in China is generally stable and good, but the ecological problems in some areas still exist. Land ecology has attracted the attention of government and scientific researchers. Based on the data of multi-source remote sensing images, the second national land survey and land use change survey, this study used statistical analysis and mathematical models to analyze the changes of land ecological status in the Yangtze River Delta urban agglomeration from 2010 to 2016. The results showed that the area of water and vegetation increased, bare land decreased, and vegetation coverage increased in the built-up area. In the entire Yangtze River Delta urban agglomeration, the area of ecological land decreased, while the area of construction land, traffic land and other land increased, the leaf area index decreased, also the net primary productivity of agricultural land decreased. The rapid development of cities has affected the land ecological condition to some extent. Therefore, in the process of urbanization, we should optimize the pattern of land spatial development, pay more attention to the monitoring and evaluation of land ecological status, and strengthen the protection and restoration of land ecosystems.

Ma, Hui
University of Ottawa, Ottawa, Canada
Gao, Song
Yunnan University, Kunming, China
Cao, Huhua
University of Ottawa, Ottawa, Canada
Registration Code: NOCQ8

Local Traditional Knowledge and its Urban Context: A Case Study of Bai Ethnic Minority in Dali, China

In the rapidly urbanizing China, local traditional knowledge (LTK) has been brought to the public's attention as a significant feature of cultural identity and inclusiveness. Especially in the ethnic minority areas, LTK may be marginalized as urban planners employ Western scientific thoughts extensively during the urbanization processes. However, it is important to respect the LTK, so that the cultural identity and social cohesion of ethnic minorities can be transmitted in the trend of modernization. The objective of this research is to explore the role of LTK in urban development in China's ethnic minority regions from the perspective of local residents within the City of Dali. In order to examine how the Bai's LTK is impacting the urban landscape in Dali, this study will employ a mix-mode methodology: a questionnaire survey, focus group discussion and participatory mapping task. The study results will shed light on the interplay of the Bai LTK and the urban landscape in Dali, and assert a better understanding of Bai LTK from the perspective of Bai people in Dali.

Ma, Ling
University of Toronto, Toronto, Canada
Registration Code: G29IF

Intensive Planning of Land Value Increment and Urban Growth Space along Pan-Asia Railway (Laos Section)

The construction of Pan-Asia Railway Network has brought economic growth to the development of countries along the route. Starting from the relationship between the change in land price and urban growth, this report studies the growing and changing processes of the cities around the newly constructed Mowan railway section in Laos. The result shows that the development of Laotian cities has a corresponding and comparative relationship with the different levels of cities in Yunnan, China. A reference system can be established through the corresponding process of historical stage to simulate the future expectation. Remote sensing analysis can be used to find the variables of urban premature movement caused by psychological expectation. Since there are more mountains and less plains along the route, and the urban expansion space is limited, this paper puts forward some suggestions of intensive planning and utilization for the future regional space development.

Ma, Sicong
Kang, Yifan
University of Ottawa, Ottawa, Canada
Registration Code: NH4DN

The Effects of Trade Globalization on China's Urbanization and Carbon-Dioxide Emission

This paper examines changes in per capita carbon dioxide emissions in China after China joined the World Trade Organization (WTO) on December 21st in 2001. Synthetic Control Method generates a synthetic control group that accurately reproduces per capita carbon dioxide emissions in China before China became a WTO member. A common trend in per capita carbon dioxide emissions in China and the weighted average emissions in the synthetic control group confirms that a Difference-in-Differences regression of China and the synthetic control group estimates a causal effect of joining the WTO on per capita carbon dioxide emissions in China.

Becoming a WTO member increased per capita carbon dioxide emissions in China by 2.61 metric tons. The result supports the hypothesis of the pollution haven model. As a result, this paper concludes that the environment in China suffered from trade liberalization.

Mawenda, John
Hokkaido University, Sapporo, Japan
Registration Code: 7JIPV

An Analysis of Urban Land Use/ Land Cover Change Using Remote Sensing Data in Blantyre City, Southern Malawi

The aim of this study is to analyze urban land use/land cover (LULC) change in Blantyre city, southern Malawi using Geographic Information Systems (GIS) and Remote Sensing (RS) in order to support sustainable urban planning. Landsat Thematic Mapper ™ satellite imagery of 1994 and Landsat Operational Land Imager (OLI) satellite imagery for 2018 were used to create two LULC classification maps. The two maps were compared to produce a transition matrix with the goal of identifying dominant signals of change in the landscape. The classification maps were generated with overall accuracy of 90 and 86 percent for 1994 and 2018, respectively. Our results show that built-up class increased from 8.10% (19.28 km2) in 1994 to 18.75% (44.61 km2) in 2018. Bare land decreased from 78.51% (186.75 km2) in 1994 to 70.87% (166.84 km2) in 2018 and vegetation class decreased from 13.24% (31.49 km2) in 1994 to 10.14% (26.08km2) in 2018. The post-classification result revealed a systematic transition of vegetation to bare land (8.07%) and bare land to built-up (12%) during the study period. The information generated in this study revealed the pressure of human activities and urban developments on land. Therefore, future land use policies need to consider such prominent signals of LULC change in order to plan an integrated approach to safeguard the fragile landscapes and ecosystems in the city.

Tchotsoua, Michel
University of Ngaoundere, Ngaoundere, Cameroon
Registration Code: GMVGA

To Build Smart Cities: What Tools for Sub-Saharan Africa? Answers Based on the Ngaoundéré GIS Data Base, Cameroon

The global population is growing rapidly: from 2.5 billion in 1950 to 7.3 billion in 2015. The average growth was about 83 million in 2017. The urban population increased from 30% of the total population in 1950 to 54% in 2016. This strong growth in the urban population results from natural population growth, migration flows and rural exodus. It is accompanied by a strong demand for urban needs in various fields. Spaces that fulfill urban functions must adapt to meet the multiple needs of the population and is why the concept was created in the 1980s. Dupuy (1982) stated that "a smart city is one that is connected to the ICT network". For the majority of authors, it is the one that uses and inserts new information and communication technologies into its various management processes in order to optimize the use of existing infrastructures on the basis of intelligent governance. Smart city governance aims to solve the current situation in a city that remains very opaque, both in terms of geolocation of infrastructure and interrelations between stakeholders. With the support of the World Bank, we have begun to transform Ngaoundere into an open and intelligent city (http://acager.org/portalgis/or ttps://www.openstreetmap.org/search?query=Ngaoundere#map = 15 / 7.3550 / 13.5743) with

free tools such as Essential GPS, Qfield, Google Earth, Earth Explorer, QGIS, Qfield, Essential GPS, JOSM. We would like to share this experience with ICCCASU3 participants.

Mosha, Aloysius
Ba Isago University, Gaborone, Botswana
Registration Code: D5T0I

Access to Land in Urban and Rural Areas of Botswana: The Issue of Inclusivity

It is commonly assumed that Botswana's land resources (amounting to over 500,000 km^2 with a population of just over 2million today) are abundant. Over the years it has become evident that some definite limits will be widely experienced quite soon. It is apparent, that the increasing shortage of land manifests itself both in the rural and urban areas. In the rural areas there are households, both female headed, male-headed and even youth headed, are experiencing problems accessing land; pasture land is deteriorating and access to arable land has also become seriously limited in several areas. In the urban areas too, in spite of many strategies that have been adopted over the years, access to land for housing and commerce is a major challenge, with the main issue being affordability and lack of finance. In this paper we cover the main issues related to accessibility to land including: legislative aspects; past and present land management aspects; the major ways of accessing land in both urban and rural areas; and challenges faced in striving for equity and inclusiveness. The paper concludes by putting forward possible strategies to make land available to all groups of society in Botswana.

Nahiduzzaman, Kh Md
University of British Columbia, Okanagan Campus
Kelowna, Canada
Registration Code: Y5N4V

Urban Transformation and Smart City: A Path-Dependent Analysis

Making cities smart has been a challenge for the contemporary cities. This phenomenon gets more complicated when there is a pressing need to adopt smart city principles against the backdrop of visible and invisible factors that are causing urban transformation on a varying magnitude. One such 'visibly-invisible' factor is e-commerce and its expanding operation, causing changes to the city's conventional spatial structure. Yet, very limited research exists about the momentum and its magnitude of impacts. Current literature predominantly focuses on the relationship and effect of e-commerce on transport study, notably the influence of e-commerce on the direction and volume of traffic flow, changing dynamics of logistics, and operational strategies. How e-commerce has been and is going to influence the city's conventional spatial structure, defined by the interwoven relationship between the city cores, fringe and rural areas, and whether it could be fed as a 'transitory' variable into building smart cities is unclear. Thus, this paper attempts to understand the changing dynamics of cities' spatial structure while focusing on e-commerce induced landscape change of the retail stores. Specifically, it aims to theoretically gauge the nature of this change by division, re-location, and fragmentation of the retail stores while conceptually capturing the scenarios through big data analytics. This stems the need for a 'path-dependency' analysis to capture the complex relationship between e-commerce induced spatial shift and smart city principles.

Ngomsi, Claude
Balagizi Asipingwe, Joel
UN-Habitat, Kenya
Registration Code: MH8DW

Hasten Sustainable Urban Development in Africa:
The Inclusive Urban Renewal Approach

Africa is the region of the world with the fastest urbanization growth; the continent accounted for 11.3% of the global urban population in 2010. With its extremely high annual growth rate compared to the world's 2.0%, Africa is expected to account for 20.2% of the global urban population by the year 2050. The continent's urban centers are characterized by low inclusiveness with high rates of unemployment among the youth, women and the disabled leading to precarious living conditions. While urban centers play a key role in the structural transformation of national economies, creation of decent jobs, and thus maintain the economic growth of the continent; they are mostly marginalized and underdeveloped, with obsolete urban infrastructures and poorly managed and inappropriate access to basic services. The mushrooming of unplanned peri-urban areas, the use of deleterious lands and the existence of dangerous structures has lead to urban unsafety, health hazards and exclusion from formal economic development opportunities. The solution as per the New Urban Agenda is to promote inclusive, innovative and integrated urban development which includes urban renewal projects. These projects will create new opportunities to improve livelihoods, living conditions, tourism and economic well-being of the continent's urban population, while preserving urban identity, environment and culture of urban centers, as well as improving access to basic services. Urban renewal will thus promote sustainable urban redevelopment across the continent.

Noubouwo, Antoine
City of Gatineau, Gatineau, Canada
Registration Code: 8RXF8

Municipal Governance and Innovation: Case Study to Improve the Citizen Experience in Quebec, Canada

The smart city relies on information and communication technologies (ICT), as well as data collection and management mechanisms, favorable to its urban, economic, urbanistic, tourist and security development and social (UN, 2008, Goin, 2017, and UMQ, 2018). This procedure, which aims at the efficiency and optimization of urban services, requires commitments and participation from the different actors that are: public service, private partners and citizens (Goin, 2017). According to the Union of Quebec Municipalities (UMQ, 2018), a smart city seeks to increase its attractiveness by reducing its ecological footprint and offering a better quality of life through the fluidity of its services and shared governance. Some cities in Quebec, Canada, have put in place strategies to rethink the service offer in a more coherent, more integrated way and better adapted to the priorities of the citizens and businesses of its territory. As part of this communication, we will present the approach and steps to take into consideration to make a city smart.

La ville intelligente s'appuie sur les technologies de l'information et de la communication (T.I.C.), ainsi que les mécanismes de collecte et de gestion de données, favorables à son développement urbain, économique, urbanistique, touristique, sécuritaire et social (UN, 2008; Goin, 2017, et UMQ, 2018). Cette procédure, qui vise l'efficience et l'optimisation des services urbains, nécessite des engagements et une participation des différents acteurs qui sont : le service public, les partenaires privés et les citoyens (Goin, 2017). Selon l'Union des municipalités du Québec (UMQ, 2018), une ville intelligente cherche à augmenter son attractivité en réduisant son empreinte écologique et en offrant une meilleure qualité de vie à travers la fluidité de ses services et une gouvernance partagée. Certaines villes du Québec au Canada, ont mis en place des stratégies visant à repenser l'offre de services de manière plus cohérente, plus intégrée et mieux adaptée aux priorités des citoyens et entreprises de son territoire. Dans le cadre de cette communication, nous présenterons la démarche et les étapes prendre en considération pour rendre une ville intelligente.

Nunes, Alice
Eduardo Mondlane University, Maputo, Mozambique
Registration Code: 0ECE2

Analysis of Social Capital in the Municipality of Inhambane

Social capital has the capacity to foster the development of regions through networks. Social capital can create networks of trust and mutual aid relationships between individuals that would otherwise not be achieved, by increasing synergies and productivity in the activities in which people are involved. The objective of this article is to analyze the level of social capital in the Municipality of Inhambane (MI) and identify the indicators that may further promote social capital. To reach this goal, the index of social capital was calculated in 11 neighborhoods of MI using seven main indicators. The Mann-Whitney U and Kruskal-Wallis test were then applied to compare if the characteristics such as the individual's sex, educational level and age would have some weight in the variation. As a result, it is concluded that although there are associations of networks in the MI, the index of social capital is average and consequently, there is no effective participation of the interviewees in the programs that could benefit them. There is a weak incentive for communities to associate themselves to common goals. Strengthening the existing social structure (greater participation in associations or networks, greater participation in common activities) may in some way stimulate activities such as agriculture and tourism, provided that the interventions have a main target of strengthening of social capital.

Omwamba, John
Sietchiping, Remy
Mangoua, Frederic
Regional and Metropolitan Planning Unit
UN-Habitat, Nairobi, Kenya
Registration Code: A5ZNC

City-Airport Transport Corridors in Africa; Bridging the Nexus between Aviation and Urbanization for Sustainable Development

The world is rapidly urbanizing with more than half the global population now living in urban areas. The trend is predicted to persist, with Africa and Asia projected to record high growth rates on urbanization up to 2030. In a rapidly urbanizing world, the need for fast and efficient mobility has seen the growth of airports and air transport services. Airports are key urban infrastructures for intercity, intra country and international mobility. However, in most countries, cities and airports are planned, managed and governed independently, leading to uncoordinated growth, traffic congestion, conflicts between airports and urban authorities and missed opportunities. This paper will unpack the twin development trends in airport and city development in sub-Saharan Africa, with a goal to elaborate how aviation and airport authorities have attempted to bridge the missing link between airports and cities. Drawing the parallel between urbanization and airport facilities in Africa, the paper will outline socio, economic and environmental benefits and opportunities that airports and cities could harness. The paper highlights how improved land uses along the transport corridors could yield mobility and socioeconomic benefits for both urban and airport authorities. The paper also reviews the trends in new airports and highways (re)development in Africa, particularly by Chinese companies. The paper also proposes possible avenues for promoting cooperation between China, Canada and Africa through airports and cities cooperation.

Onatu, George
Thwala, Didibhuku
University of Johannesburg, Johannesburg, South Africa
Registration Code: MP14C

A New Approach to Human Settlements Development in South Africa: Mixed Income Housing Development Framework

The debate on informal settlements is gradually shifting from that of 'bad image' of the city landscape to places of residence and socio-economic activities, in which the inhabitants pursue a variety of livelihood strategies. This paper looks at an attempt by the City of Johannesburg Metropolitan Municipality and eThekwini Metropolitan Municipality to coopt residents of informal settlement into formal neighborhood through mixed income residential development strategy. Although the term 'mixed-income housing development (inclusionary housing)' is becoming widely used and increasingly popular, there remains certain gaps and many unanswered questions that will require additional research on how best to respond and what the expected outcomes are, as well as how it can improve the quality of life and prospects of low-income families. Despite the importance and popularity of the concept of mixed-income housing in national housing policy circles, it is noted that very few studies have attempted to evaluate the conditions under which programs have succeeded or failed and the implications for future programs. This calls for an investigation. The research methodology will be Delphi approach. Conclusions drawn from this research shows that for mixed-income to be sustainable and meet the current urban development agenda there is a need for Public-Private Partnerships and intersectoral cooperation. The debate around the implementation strategy and the nature of "mix" in any given housing development project is still open for further investigation.

Siyam, Sylvie
Akoa, Philippe Camille
Menye Me Noah, Fabrice
FEICOM, Yaoundé, Cameroon
Registration Code: OHSXH

Measuring Local Development to Ensure Equality, Inclusivity and Development

In the bid to address the issue related to an efficient orientation of funds to local councils, Cameroonian Ministry of decentralization and FEICOM (Special Council Support Fund for Mutual Assistance) designed a tool that can help optimize the allocation of resources to local councils in accordance with their real needs while respecting the solidarity principle, prized by the government. The Local Development Index (LDI) which tends to be the unique and progressive measure of the wellbeing of a territory's population, is calculated through the measurement of the existence of basic needs and services provided by local authorities and their appropriation by the population. The process of elaboration starts from the definition of the concept of local development to the identification of aggregated indicators into an Index (Boulanger Method). The next steps are based on a field diagnosis that has permitted the gathering of perception actors of local development and allowed for a keen selection and ranking of domains and indicators, prior to aggregating them. LDI has been tested in four local councils, it ranks from 0 for a valueless to 1 for an achieved level of development. It enables every local council to evaluate their own development level and also permits a clear view per sector. Concretely, LDI can be used in operations such as resource allocation between local councils, town and development planning, promotion of democracy and local governance.

Qin, Peng
Qingdao Agriculture University, Qingdao, China
Registration Code: QLNOV

The Revolution of Wetland Landscape Disturbance in Jiaozhou Gulf from 1980 to 2017

As an important ecosystem, wetlands are being affected by human activities. The trend of area reduction and functional degradation is more severe. Its landscape pattern and ecological environment can respond quickly to external disturbances. The zone of Jiaozhou gulf was selected as the study area. Anthropogenic disturbance index and landscape transformation methods were used to analyze the evolution of wetland disturbance in Jiaozhou Bay from 1980 to 2017. The type of disturbance dynamic change was identified. The results show that the conversion mode of landscape disturbance types was different, wetland landscape patterns present fragmentation trends, because of the divisions of artificial wetlands and other land. Human disturbance landscapes continues to increase, the landscapes of man-made non-recycling type increase more than that of man-made recycling type. The river estuary is the most active region of strong disturbance. The conversion rate with the area of 96.22km2 is highest between 1990 and 2000. With the method of K-Means clustering algorithm, the change tendencies of transition coefficient were grouped into four categories: enhance and then weaken, overall weakening, weaken and then enhance and overall stable. The area with deteriorating trends accounts for 88.77% of the total area of the entire area. Based on the natural geography

condition, the wetland of Jiaozhou gulf is susceptible to human disturbances, industrial policy and economic development enhanced this process.

Ren, Zhibin
Northeast Institute of Geography and Agroecology,
Chinese Academy of Sciences, Changchun, China
Registration Code: G8BXB

Changes in Spatiotemporal Patterns of Urban Forest and its above-ground Carbon Storage: Implication for Urban CO2 Emissions Mitigation under China's Rapid Urban Expansion and Greening

Urban forests (UF, >0.5ha) in China experienced a dramatic change due to urbanization. Understanding spatiotemporal dynamics of UF and its above-ground carbon storage (CS) is important for mitigating urban CO2 emissions in planning of UF space. The objective was to explore temporal changes in the spatial pattern of CS by UF and the role of CS changes in mitigating the urban CO2 emissions. This research used statistical models to evaluate spatiotemporal changes of CS by UF from 1984 to 2014. We estimated spatiotemporal changes in CS by combining multi-temporal Landsat TM imagery with field survey data of the city of Changchun, China. Normalized difference vegetation index (NDVI) data obtained from TM image and CS derived from field-based surveys were amalgamated to develop a regression model to predict spatiotemporal patterns of CS. NDVI correction model was established by normalizing previous imagery (1984, 1995, and 2005) to 2014 image data. Both UF area and its CS increased gradually from 1984 to 2014, especially in outer rings of the city. CS showed a definite decreasing trend from outer rings to downtown. Due to urban greening policies, landscape patches of UF or CS by UF recently became larger and more aggregated. It was estimated that the average annual increase of CS by UF could offset 3.9% of the average annual increase in urban carbon emissions. Our study proposes that spatiotemporal changes in UF patterns dramatically affected the amount of CS and carbon capture.

Rosmadi, Amalia
Zhou, Wuzhong
Shanghai Jiaotong University, Shanghai, China
Registration Code: **H7JRL**

Gamification of Mobile Application in Raising Eco-Awareness amongst Youth in China

Ecological problems are widespread and exceptionally severe in China. Despite ongoing efforts with various platforms in spreading ecological awareness (eco-awareness) worldwide, there is still space to improve youth's familiarity and understanding of sustainable behaviours, especially using elements of technology, which in this case uses the gamification principles as a tool for mediation in the country where 98% of youth are using smartphones in their daily life. This concept paper will investigate whether applying gamification principles in a mobile application to encourage sustainable behaviour towards recycling, would aid to behavioural change in raising eco-awareness amongst youth in China. This study will be conducted by involving measures to capture deep understanding through unstructured interviews, questionnaires and experiments to investigate the occurrences from the youth's point of view.

Results from the findings will give the base of understanding for the current situation amongst youth in China. The research results are valuable to various stakeholders in China, empowering them to utilise gamification to educate youth users on the ecological risk and further create a society with sustainable behaviours.

Sant'Anna, Marcus
Federal University of Viçosa, Brazil
Zhou, Wuzhong
Shanghai Jiao Tong University, Shanghai, China
Registration Code: CB25K

Green Urban Spaces in Shanghai and the Role of ICT's in User Behaviour

A key issue in architectural and landscape design research is to understand how to engage users with the designed object. In the case of open public spaces, many researchers have been conducting behavioural studies about the relationship between space affordances and users in order to improve design effectiveness and space appropriation. Another issue to consider is the social morphology of our current society, where the overall activities are organized around information networks. In this sense, everyday life is intertwined with all sort of ubiquitous systems or combined into smart gadgets. We can consider that, if the previous spatial experience was defined by topological attributes of a given space, now, under the rise of urban computing, it is established by a hybrid space where Information and Communication Technologies (ICT's) mediates the gap between the user and the physical space. The main objective of this paper will be to present results from of an ongoing pilot test being conducted in urban green areas in Shanghai, China. We aim to highlight the role of ICT's in the process of user engagement within a defined number of settings within three urban parks in the downtown area. Behaviour mapping, a technique used to conduct systematic observation that follows user's behaviour within the built environment is being applied to collect and demonstrate how daily use of ICT's in open public spaces are related to the design of such spaces and how we can stablish the use pattern of hybrid spaces in Chinese urban green areas.

Tchinda, Paul Emile
Urban and Rural Land Development and Equipment Authority (MAETUR), Yaoundé, Cameroon
Registration Code: 8PUT5

The Paradox of Security Planning in Sub-Saharan Africa: Challenges and Perspectives of the Implementation of Smart Technology Systems

Most studies highlighting the link between the urban environment and safety have focused on vacant spaces in urban areas, Petherick, A., Fraser, R., (1992), Tom McKay (1994). Thus, by concluding that the absence of activity and people in space makes it potentially dangerous, these studies implicitly state that the presence of activities and people in space makes it more secure. However, is this reciprocal still true? The objective of our communication proposal is to highlight the paradox of security planning principles in the context of sub-Saharan Africa. More specifically, it is a question of establishing the causal relationship between traffic congestion and overcrowding in terms of activities and people and the safety of intersections. This work is

an emerging research project based on exploratory hypotheses. The example of downtown Yaounde is used to show how a space that meets the principles of security planning, such as visibility (see and be seen), traffic (hear and be heard) and formal surveillance and access to assistance (escape and rescue), remains highly exposed to the risks of insecurity. By drawing a parallel between the introduction of video surveillance in this environment and the persistence of the insecurity phenomenon, we wish to contribute to a better understanding of the insecurity phenomenon in urban areas at a time when the continent is increasingly tending towards the creation of smart cities. This also allows us to offer applications that can be adapted to the local context.

Togolo, Jean Pierre
University of Yaoundé 1, Yaoundé, Cameroon
Registration Code: 1LVHS

The Stakes of a Transformed Colonial Heritage in Yaoundé

In the aftermath of independence, African countries face a dilemma. On one hand, they show the desire to get rid of colonial rule in symbols of the nation-state building process, on the other hand want to keep certain symbols (monuments, buildings, streets, etc.). This article aims to revisit the issues of some changes made to the German, the British and the French colonial heritage in Yaoundé, the capital city of Cameroon. In a multidisciplinary approach, this article intends to identify first, symbols of German and French colonization in Yaoundé, then understand their importance in the colonial context using the historical method, then show the political and ideological issues in their postcolonial transformations.

Wan, Guangcheng
Liu, Yuxuan
Yu, Yang
Qingdao University of Technology, Qingdao, China
Registration Code: 1IXBO

Research and Transformation of Slow System Nodes in Qingdao Historical and Cultural Streets under the Background of Big Data

Under the background of rapid development of urban motor vehicle traffic, serious problems have arisen in slow system planning. In this paper, the research on the slow system nodes of 13 historical and cultural blocks in Qingdao is conducted. The pedestrian traffic micro-simulation technology is used to study the street type and the flow distribution through UNA and IOP software. The historical block slow-moving system is described in detail. The existing problems of the nodes propose three types of historical and cultural blocks slow-moving system node transformation plan that meets the urban positioning of Qingdao, and summarize some new ideas and new ideas of the transformation plan.

Wang, Hong
Shanghai University, Shanghai, China
Registration Code: 570WZ

Toward More Sustainable High-Rise Building: A Case of Shanghai Center

With the aim at investing in infrastructure far across the distant spaces in continents, the One Belt, One Road (OBOR) initiative has the potential to transform urbanization, architecture, and technology from East Asia to North America, Africa and beyond. Greening the OBOR is China's response to the 2030 Sustainable Development New Agenda set by the United Nations. Now, China is moving towards the way of ecological civilization with the basic national policy to control greenhouse gas emissions, conserve resources and protect the environment. Taking Shanghai Center as an example, this paper discusses its innovative practice of sustainable development in architectural energy-saving design, intelligence system and humanistic care. Firstly, Shanghai Center has adopted a series of energy-saving measures, such as heat recovery and utilization technology, rainwater collection, treatment and reuse technology, the glass curtain wall and indoor air garden. Secondly, the building intelligent system of Shanghai Center concerns intelligent lighting technology, multi-energy management system, and lean management based on BIM technology. Thirdly, its human care is reflected from the building structure, nine vertical communities, "a sky lobby" for recreation, and other multi-functions. In 2015, Shanghai Center won the LEED platinum award, showing its outstanding responsibility in environmental value, economic value and social value. As the highest green building in the world, Shanghai Center acts as fantastic model for its construction.

Wang, Huaming
Xi'an Jiaotong University, Xi'an, China
Registration Code: WSV6U

Correlation between Block Layout and Wind Environment

With rapid urbanization in China, the high-density new urban-center districts have already begun to change the microclimate in the city. The construction of new commercial pedestrian streets which have emerged, massively contributes to an increase in the number of pedestrians. The comfort of the pedestrians in the commercial streets of the new urban-center districts requires more attention. Different spatial layout of the streets will change the wind environment and then influence the pedestrian comfort. We take the Xi'an area as an example, using computational fluid dynamics (CFD) models to study the correlation between the street layout and wind environment, under the simulation with relevant weather conditions. The results show that the wind speed in the city streets is inversely proportional to the block layout, and the north-south street temperature is lower than the East-West Street. The conclusion will provide an evaluation basis for urban planners and architects at the beginning stage of the design to effectively avoid the potential poor physical environment.

Wilczak, Jessica
University of Lausanne, Lausanne, Switzerland
Registration Code: B0KMY

From Collective to Community: Farmers-Turned-Citizens as Community Builders in Peri-Urban Chengdu

Informality is often considered a hallmark of peri-urban development in the cities of the Global South. But informality hardly seems to characterize China's recent national urbanization policy, which has ushered in a new era of state-led, infrastructure-driven growth. In the western Chinese city of Chengdu, social infrastructure and community-building policies are playing an equally large but under examined role in urbanization planning. Drawing on ethnographic fieldwork and interviews, this paper traces the policy rationales, genealogy, and activities of a new "model" community centre in Chengdu's urban fringe. While it is possible to read the activities carried out in the centre as top-down initiatives aimed at managing a now surplus population of former farmers and cultivating patriotic, "civilized" urban residents, I argue that a bottom-up analysis-foregrounding the key role of former village institutions, residents, and leaders in managing the new community—helps reveal the persistant influence of the rural in shaping new forms of the urban in suburban Chengdu. Though far from informal, such attempts to stake a claim on village territory and identity might be thought of as improvisational reworkings of both current state-provided infrastructure and earlier collective institutions.

Wu, Jiang
Tongji University, Shanghai, China
Registration Code: SBNZ5

Book Launch: Net Zero Carbon Village Planning Guidelines for the Yangtze River Delta Region in China

In recent years, the Yangtze River Delta (YRD) region in eastern China has faced unprecedented risks to its natural and urban environments. The inherent vulnerability of this highly valued eco-system and agricultural area due to the large concentration of neighbouring metropolitan areas, economically strategic position along major shipping lanes and manufacturing hubs, as well as the interlinked conflict between social and economic development and environmental conservation, needs to be addressed. Net Zero Carbon Village Planning Guidelines for the Yangtze River Delta Region in China proposes 10 principles for village planning which aim to support government and planning authorities to plan, design, and implement practices that help close the energy loop in rural communities. Although carbon neutrality is a widely discussed topic in dense urban areas, the Guidelines are innovative in capturing strategies that maintain carbon sinks and limit GHG emissions in otherwise neglected communities, helping mitigate carbon emissions regionally, setting a gold standard for urban-rural linkages worldwide, and improving livelihoods by directly addressing SDGs 6-13. The intent of the publication is twofold: to encourage the adoption and replication of net zero carbon planning and design principles which support sustainable development and behavioural practices in rural areas; and to positively influence ecological policy and social changes in urban areas.

Wu, Wei
Nanjing Agricultural University, Nanjing, China
Abiyot, Legesse
Dilla University, Dilla, Ethiopia
Registration Code: 6A5UX

Study of Urbanization, Ecosystem Services Alteration and Human Wellbeing in the Great Rift Valley Region of Eastern Africa; a Perspective from Land Use/Land Cover Dynamics

Land use is one of the most closely associated links between humans and nature. The relationship between urbanization, ecosystem services and human wellbeing from the perspectives of land use changes is an important cross topic in research concerning natural, socioeconomics and biophysical environment to sustain regional development. It is apparent that urbanization alters the structure and function of both natural and agro-ecosystems with subsequent deterioration of the services they provide to the society causing livelihood crisis. The current global and regional trend of urbanization shows a massive expansion of urban areas, this growth being actually generated by the numerical population growth and migration. Obviously, urban development determines changes regarding the organization of places, economic and social changes but these effects exceed the territorial barriers and generate a broad impact. Urban growth in Ethiopia has both positive and negative impacts. When the growth is unplanned and unregulated, the impacts would inflict serious damages such as loss of biodiversity, social and economic crisis. This study aims to emphasize on the analysis of the effects of both urban and rural land use dynamics on major aspects of ecosystem services pertaining to human well-being, particularly in terms of livelihood and food security in the Great Rift Valley area of the eastern Africa. The results may provide new insights into achieving regional sustainability with adaptive land use usage and protection.

Wu, Yaojun
Shanghai Jiaotong University, Shanghai, China
Registration Code: DU9XG

Social Sustainability of Urban Regeneration in Historic Community: Case of Suzhou Pingjiang Road

Sustainable community has been advocated as a remedy to cure the negative impacts of urban regeneration on historic communities. Pingjiang Road regeneration project in Suzhou old town (covers 116 hectares area) which was carried out 15 years ago has been widely studied by scholars on historic building conservation and local tourism development. However, its social impacts on local communities were generally ignored. This study applied the connotation of social sustainability from sustainable community perspective to explore the social sustainability of this regeneration activity and its social impacts on local historic communities. To achieve the research aim, four aspects of social sustainable community, namely, social cohesion, social justice, community empowerment and culture vitality were surveyed in the local communities. 80 participants from local communities, including residents, businessmen and tourists, participated in the questionnaires and interviews. It is found that this regeneration project actively promoted culture vitality, which means the traditional cultures and local culture characteristics have been strongly protected. However, it failed on social cohesion, social justice

and community empowerment aspects. The conflicts between residents and businessmen increased, economic benefits generated by the regeneration activities were unfairly shared between residents and businessmen, and the community members were nearly excluded from the decision making of community affairs. Suggestions were finally proposed.

Xiao, Qiong
Southwest Minzu University, Chengdu, China
Registration Code: L5WTC

On Spatial Formation Mechanism and Development of Tibetan Commercial District of Chengdu City

Chengdu has been an important center of economic and cultural exchanges between Tibetan areas and the interior areas since ancient times. It is also an important urban space for ethnic communication, interaction and integration. Especially since 2000, with the development of the social economy and the closer social exchanges between ethnic groups, the commercial exchanges of the Tibetan migrant population in Chengdu have become more frequent, and the number of Tibetan migrant population with a variety of social needs has also increased. At present, a relatively mature and large-scale Tibetan commodity district as well as a Tibetan residential area is formed in Chengdu. Due to the formation of Tibetan commercial district, the urban settlement space of the ethnic migrant population in Chengdu has some new characteristics in the new era. On the other hand, it has also made Chengdu a historical and cultural city with more urban inclusiveness and cultural diversity. Thus this paper will focus on the spatial formation mechanism and the development status of Tibetan commercial district in Chengdu city, and reveal the industrial support and development tendency of the urban settlement space of the ethnic migrant population. The research of this paper will be beneficial to promote the rational migration of the urban ethnic minority population, enhance its social adaptability in the city, and also benefit the spatial planning, in order to promote the sustainable urban development.

Xu, Jiabo
Wang, Xingping
Southeast University, Nanjing, China
Registration Code: **LP6CA**

Cooperation or Capital? Sino-African Special Economic Zones as both Government Programmes and Business Investments

These overseas SEZs are, according to MOFCOM guideline, supposed to be run by enterprises based on business principles aiming at facilitating the win-win relationship. Therefore, decisions in Sino-African SEZs should be made by enterprises given the market, investment environment, and policies in the holding countries. By establishing such kind of cooperation zones, the holding countries will be able to attract more firms and investment which would increase the employment, tax revenue, exports, and foreign exchange. Chinese overseas SEZs are both capital investment (as they are company-led which means they are supposed to be profitable) and development cooperation (as they are government-initiated which means they are supposed to produce positive effects beyond profits or even without profits like the current situation in

most overseas SEZs cases). Understanding this dual-character is important when assessing whether these SEZs are successful or not, as the government willingness sometimes might not be completely consistent with business profits.[Foundation: The National Key R&D Program of China (No. 2016YFE0201000) Research Cooperation and Exemplary Application in Planning of Overseas Industrial Parks][Foundation: Research on Development Model and Planning Guidance Mechanism of Jiangsu Overseas International Cooperation Parks (No. 17EYA001)]

Xue, Honggang
Lanzhou Jiaotong University, Lanzhou, China
Registration Code: 2C6KT

An Analysis on the Environment Renovation of the Villages Street in City from the Perspective of Cultural Memory: Take Yangming Lane, An'ning District, Lanzhou City as an Example

Urban renewal has become the driving force and main form of urban construction in the new era, among which the renovation of shantytowns and villages in the city is gradually becoming the prominent problems. In the context of the revival of traditional culture being national policy, contributing a mechanism that takes cultural memory space creation as a mean of urban renewal so as to promote both villages in the city and urban renovation, and then finally realizing the purpose of reshaping the sense of social groups' identity and belonging as well as continuing local cultures and contexts. This paper takes Yangming lane in An'ning district of Lanzhou district as the research object, explores the connotation of cultural memory in local areas. Also this paper analyzes the strategies and measures of street environment renovation, studies the theory and methods of comprehensive improvement of villages street environments in the city from the perspective of cultural memory.

Yan, Yiran
Wang, Xingping
Southeast University, Nanjing, China
Registration Code: UMVUC

Research on the Spatial and Temporal Differentiation of Industrial Agglomeration and Urbanization Coupled Coordination in Africa

By using data of industrial output, manufacturing output, mining output and the population urbanization rate of 53 African countries (regions) in 2009 and 2016 to evaluate coupled coordination features and geographical changes. The conclusions are as follows: The degree of coupled coordination of countries (regions) with a high degree of manufactural agglomeration is generally sounder than countries (regions) dominated by mining industry; The coupled degree of industrial agglomeration and urbanization in most countries (regions) is gradually increasing; The correlation between industrial agglomeration and urbanization is relatively low in African countries (regions), and the phenomenon of informal employment is prominent in some countries. Acknowledgment: This research is supported by the National Key R&D Program of China (No. 2016YFE0201000): Research Cooperation and Exemplary Application in Planning of Overseas Industrial Parks.

Yemeru, Edlam
United Nations Economic Commission for Africa, Addis Ababa, Ethiopia
Registration Code: 6T694

Urbanization and National Development Planning

As a growing share of Africa's population becomes urbanized, the fight against poverty and inequality through structural transformation is to be won or lost in cities. The ability of African economies to achieve structural transformation and broad-based economic growth depends on their capacity to create high productivity jobs, which are located largely in urban areas. Both historical and empirical evidence confirm the link between urban agglomerations and economic growth. Yet, many African cities are not realising their productive potential, due to a myriad of constraints, including infrastructure gaps, inefficient land use, disconnected sprawling development, and mobility barriers. At the same time, however, cities contribute more than 50% of national GDP in many African countries. Despite this enormous economic weight, cities are often an afterthought in national economic planning in Africa. African national development plans do not set a strategic, cross-sectoral vision of urbanization as a necessary driver of economic growth. National development planning rarely prioritize urban jobs, a prerequisite of structural transformation. Agriculture is prioritised over urban economic productivity, even in countries with more than 50% urban population, and cities drive GDP growth. This results in urban underinvestment, with significant consequences for the economy in the long term. This paper presents a unique model to integrate urbanization in national development planning so that cities drive structural transformation.

Yue, Wenze
Zhejiang University, Hangzhou, China
Registration Code: GQRQE

Monitoring Urban Land Sprawl for China Mega-Cities and Policy Implication

Since the mid-20th century, urban sprawl has been a prevalent problem across the cities of North America and has attracted particular interests. Urban sprawl has often been criticized because of its negative impacts on open spaces, energy consumption, air quality, ecosystem services, physical health, poverty and inequity, and intergenerational mobility. Understanding the forms and processes of the urban sprawl has significant implications to land policies and urban management. We developed a China urban sprawl index from population density, spatial form and economic efficiency dimensions and measured the urban sprawl for over 100 Chinese mega-cities. We established a government-leading, land-based capital accumulation framework to explain the special driving forces on China's urban sprawl. Finally, from the perspective of land policy we discussed the relevant policy implication.

Zacharias, John
Peking University, Beijing, China
Registration Code: JOFH0

Urban Development Outcomes of High-Speed Rail Development

This paper is an analysis of multiple, separately reported development outcomes of high-speed rail (HSR) development as revealed in recent published papers. A review was undertaken of 232 papers published in SCI or SSCI with empirical contribution to the link between high-speed rail infrastructure and increased investment in urban development. Of these, 18 offer specific insights into the development effects of high-speed rail at intra-urban, inter-urban and long-distance scales. The papers draw on a growing international literature on HSR in China, but also with findings from Europe and Japan. It is clear that HSR supports higher levels of local economic investment, including urban development in cities served by HSR. City-pair linkages via HSR take a number of different forms, in accordance with city strengths, proximity and linkage with other transport modes. At the macro-scale, disparities can be reduced through HSR implementation. At the regional scale, disparities may increase between the rail transport node areas and peripheral zones increasingly dependent on road infrastructure. Local integration also has proven important in generating synergies that raise ridership and increase local investment. A track record of land development associated with HSR provides the evidence for general guidance on optimizing urban development outcomes while building up HSR. This presentation ends with a summary of what we know about rail system development thus far that is most associated with favourable urban development outcomes.

Zeng, Jue
China Land Surveying and Planning Institute, Beijing, China
Registration Code: 3JJBH

Design and Development of Field Survey and Verification System Based on Internet+

Land field surveys and verification is an important means to understand the status quo of land, and the basis and necessary links of land management. How to realize the technological progress of land survey and verification and meet the need of land management is an urgent problem that needs to be addressed in current land management. In this paper, we used the integration technology of mobile Internet, cloud services and 3S technologies to design and develop the field survey and verification system based on Internet+, and introduced practical examples.

Zhang, Jingxiao
Chang'an University, Xi'an, China
Registration Code: **1U9VF**

Research on the Influence of Emission Trading System on the Green Innovation Efficiency of Enterprises: An Empirical Analysis Based on Double Difference Method

In order to effectively solve the environmental pollution problem, the government introduced a market mechanism to conduct trials of emissions trading policies in some regions, and hoped to achieve emission reduction targets at lower costs, encourage industrial enterprises to innovate, and push for green production technology advancement. However, research on the impact of this policy implementation on the efficiency of green innovation in industrial enterprises is relatively lacking. Therefore, this article takes China's emission trading policy as an example. Based on the provincial panel data from 2004 to 2012, SBM-DDF was first used to calculate the green innovation efficiency, and then the double difference method was used to empirically test the mechanism of the implementation between the policy implementation and the green

innovation efficiency of industrial enterprises. The research finds that (a) the efficiency of green innovation in industrial enterprises shows an upward trend year by year;(b) the implementation of this policy significantly improves the efficiency of green innovation in industrial enterprises;(c) industrial scale, economic development level, and human capital can promote green innovation efficiency, while foreign direct investment and government financial support hinder the efficiency of green innovation. The research in this paper provides reference for the institutionalization, standardization and promotion of China's emissions trading policy.

Zhao, Dan
Yang, Bin
Beijing Municipal Institute of Urban Planning and Design, Beijing, China
Registration Code: YGVT5

Research on Urban Resilience Planning System Based on Risk Assessment and Resilience Evaluation: A Case Study of Beijing

Urban resilient planning is an important means to deal with uncertain risks and ensure urban security. In this study, a theoretical system of urban resilient planning integrating "risk - vulnerability - resilience" is constructed. Taking the mega-city Beijing as an example, a risk database was established; the comprehensive risk assessment of "total factors, total space and the whole process" was carried out, and a comprehensive risk map of the whole city and the central city was drawn. On this basis, the paper further clarifies the goal and path of Beijing's resilience urban planning, and puts forward countermeasures and suggestions for improving resilience, such as urban scale control, spatial layout optimization, infrastructure guarantee and response capacity improvement.

Zhao, Shengbo
Southeast University, Nanjing, China
Wu, Huijun
Hunan University, Hunan, China
Registration Code: TJP4C

Reflections from Industrial Perspective on the Transformation of Urban Villages in China: An Empirical Study of Jiangwanying in Hefei City

The urban villages are the product of urbanization processes. Its formation can be attributed to the expansion of urban space and the attribute conversion of rural settlement surrounded by the urbanized area, and thus has the characteristics of urban and rural duality. The function of China’s urban villages is now mainly to carry the living of local & non-local populations and various informal economies. The urban villages gradually marginalized in the urbanization were not only driven by external forces from government, commercial projects, etc., but also because the space format and value were no longer adapt to the rapid urbanization. Promoting the transformation of urban villages with industrial development is a rational path to realize spatial value-added and escape from decline. The industrial development of urban villages in China faces problems such as weak foundation, lack of characteristics, poor environment and insufficient transformational motivation. Based on the problems, this paper proposes four development principles “converting driving force, adapting to local conditions, regional

integration, and gradual progress" to strengthen the industrial foundation, highlight the characteristics and optimize the environment. Taking Jiangwanying in Hefei City as empirical case, the research believes that the industrial revitalization and self-sustainability could be achieved by promoting informal economy specialization, developing local historical resources rationally and optimizing the community's living environment.

Zhao, Yawei
Eliot Tretter
University of Calgary, Calgary, Canada
Registration Code: BW9DE

Bike-Sharing in the Smart City Era: Post-Automobility in Canada and China

The Smart City has since the 2010s been described as a new favourable and ambitious urban imaginary, with a wide variety of Smart projects being premised on promoting a healthier and more socially and ecologically sustainable urban future. Yet many critics have noted that the Smart City, despite its utopian vision, is dominated by private for-profit companies that benefit from the uncommoning of the urban spaces via smart technologies across the world. This paper explores the rollout of urban smartness in Canada and China with a comparative study on a newer generation of bike-sharing schemes in the Canadian city of Calgary and the Chinese city of Wuhan. Bike-sharing as a Smart mobility technology has offered the promise of post-automobile centric urbanism for both cities, but posed different challenges to socio-spatial equality in these two cities.

ICCCASU ORGANIZATIONAL STRUCTURE

Board of Directors:

The International Conference on Canadian, Chinese and African Sustainable Urbanization (ICCCASU) is governed by a Board of Directors which is primarily responsible for setting policy, monitoring the financial well-being of the organization, and making decisions pertaining to all major ICCCASU issues. Membership on the Board of Directors is for a period of 2.5-years (extending until the end of 2021).

Role: Determining the structure, policies, governance and future of the organization. Members are drawn from those who have been involved with ICCCASU from its inception and have been actively involved in its three conferences.

- **Badiane, Alioune,** The Urban ThinkTank Africa, Senegal
- **Cain**, **Allan,** Development Workshop, Angola
- **Cao**, **Huhua,** University of Ottawa, Canada
- **Cishahayo**, **Jean-Marie,** University of Ottawa, Canada
- **Huang**, **Zhengli,** Sheffield University, England
- **Gianni**, **Benjamin,** Carleton University, Canada
- **Li**, **Yangfan**, Xiamen University, China
- **Liu**, **Vivian,** Health Canada, Canada
- **Ngomsi**, **Claude,** UN-Habitat, Kenya
- **Raynaud**, **Michel Max,** Université de Montréal, Canada (TBC)
- **Tuts, Rafael,** UN-Habitat, Kenya
- **Wang, Xingping,** Southeast University, China
- **Yang, Rong,** UN-Habitat, Kenya
- **Zacharias**, **John,** Peking University, China

Strategic Adviser: **Mbwentchou**, **Jean-Claude,** Former Minister of Housing and Urban Development, Cameroon
Secretary: **Mundele**, **Tonton,** Global Affairs Canada, Canada

Advisory Committee:

The Advisory Committee consists of a group of individuals from various sectors and disciplines around the world with expertise and/or an interest in urbanization and sustainable urban development. The mandate of the Advisory Committee is to provide advice to the Board of

Directors and the Organizing Committee on ICCCASU's development policy, the well-being of the organization, and all major ICCCASU initiatives. The members of the Advisory Committee are also asked to promote ICCCASU and advocate on its behalf. Membership on the Advisory Committee is for a period of 2.5-years (extending until the end of 2021).

Canada:

- **Bressani**, **Martin,** Director, Peter Guo-hua Fu School of Architecture, McGill University, Canada
- **Harris**, **Gordon,** CEO, SFU Community Trust, Canada
- **Stoner**, **Jill,** Director, Azrieli School of Architecture and Urbanism, Carleton University, Canada (TBC)
- **Yaya, Sanni,** Director, School of International Development & Global Studies, University of Ottawa, Canada

Africa:

- **Agbola**, **Babatunde,** Professor, University of Ibadan Nigeria
- **Chumbow**, **Beban Sammy,** Acting President, Academy of Sciences, Cameroon (TBC)
- **Fadili**, **Monceyf,** Architect and urban planner from UNESCO and representative of UN-Habitat in Morocco
- **Garba Abdou**, **Issaka,** Secretariat of the Housing and Urban Development Sub-Committee, Africa Union Commission
- **Mutizwa-Mangiza**, **Naison,** Director, Regional Office for Africa, UN-Habitat (TBC)
- **Sardaouna**, **Ahmadou,** Secretary General, Ministry of Housing and Urban Development, Cameroon

China:

- **Gu**, **Chaolin,** Professor, Tsinghua University, China (TBC)
- **You**, **Nicholas,** Executive Director, Guangzhou Institute for Urban Innovation, China

International:

- **Dehoorne**, **Olivier,** Professor, Université des Antilles, France
- **Han**, **Ruibo,** Director of Programs at the Center of Geospatial Science, University of Maryland, United States
- **Zárate**, **Lorena,** President, Habitat International Coalition (HIC)(TBC)

Scientific Committee:

The Scientific Committee consists of a group of experts from various sectors and disciplines related to ICCCASU objectives all over the world. Its mission is to provide valuable advice to the Board of Directors and the Organizing Committee, as well as to assist in the promotion of

ICCCASU initiatives. Membership on this Committee is for a period of 1.5-years (extending until the end of 2020).

- **Assako Assako, René Joly,** University of Douala, Cameroon
- **Cain**, **Allan,** Development Workshop, Angola
- **Cao**, **Yang,** Shanghai Institute of Technology, China
- **Cooper**, **Ian,** Employment and Social Development Canada
- **Dehoorne**, **Olivier,** University of the West Antilles, France
- **Gianni**, **Benjamin,** Carleton University, Canada
- **Gao**, **Yanli,** China Land Surveying and Planning Institute
- **Guo**, **Dingping,** Fudan University, China
- **Guo**, **Xudong,** China Land Surveying and Planning Institute
- **Han**, **Haoying,** Zhejiang University, China
- **Han**, **Ruibo**, University of Maryland, United States
- **Lamin**, **Abdul Rahman,** UNESCO Regional Office for Eastern Africa, Kenya
- **Li**, **Yangfan,** Xiamen University, China
- **Morar**, **Cezar,** University of Oradea, Romania
- **Moser**, **Sarah,** McGill University, Canada
- **Mundele**, **Tonton,** Global Affairs Canada, Canada
- **Ngomsi**, **Claude,** UN-Habitat, Kenya
- **Noubouwo**, **Antoine,** Ville de Gatineau, Canada
- **Piché**, **Denise,** Université Laval, Canada
- **Raimundo**, **Inês Macamo,** Eduardo Mondlane University, Mozambique
- **Raynaud**, **Michel Max,** Université de Montréal, Canada
- **Sardaouna, Ahmadou,** Ministry of Housing and Urban Development, Cameroon
- **Sietchiping**, **Remy,** UN-Habitat, Kenya
- **Wang**, **Xingping,** Southeast University, China
- **Yang**, **Rong,** UN-Habitat, Kenya
- **Yaya**, **Sanni,** University of Ottawa, Canada
- **Yemeru**, **Edlam Abera,** United Nations Economic Commission for Africa, Ethiopia
- **Zacharias**, **John,** Peking University, China
- **Zhang**, **Henglong,** Shanghai University, China
- **Zhao**, **Bing,** Southwest Minzu University, China
- **Zhou**, **Fengqi,** Shanghai Academy of Social Science, China

Organizing Committee:

Under the leadership of the Board of Directors and in close collaboration with the Advisory Committee and the Scientific Committee, the Organizing Committee is principally responsible for managing the daily operations of the ICCCASU, including planning for conferences and the

preparation of proceedings. Membership on this Committee is for a period of 1.5-years (extending until the end of 2020).

Honorary President:

- **Badiane**, **Alioune,** The Urban ThinkTank Africa, Senegal

Co-Presidents:

- **Tuts**, **Rafael,** UN-Habitat, Kenya
- **Cao**, **Huhua,** University of Ottawa, Canada

Vice-Presidents:

- **Gao**, **Yanli,** China Land Surveying and Planning Institute
- **Gianni**, **Benjamin,** Carleton University, Canada
- **Qiu**, **Aijun,** China Center for Urban Development
- **Raimundo**, **Inês Macamo,** Eduardo Mondlane University, Mozambique
- **Yang**, **Rong,** UN-Habitat, Kenya

Academic Chairs:

- **Wang**, **Xingping,** Southeast University, China
- **Mundele**, **Tonton,** Global Affairs Canada, Canada

Program Chairs:

- **Ngomsi**, **Claude,** UN-Habitat, Kenya
- **Li**, **Yangfan,** Xiamen University, China

Chair for External Relations and Coordination:

- **Cishahayo**, **Jean-Marie,** University of Ottawa, Canada

Chair for China Relations:

- **Zhang**, **Liqin,** University of GeoSciences, China / University of Ottawa, Canada

Research Chair:

- **Hubert**, **Nicolas,** University of Ottawa, Canada

Strategy Consultant:

- **Zhu**, **Weiping**, Hangzhou Zhongwei Electronics Co., Ltd, China

IT Team:

Chair:

- **Huang**, **Simon,** University of Ottawa, Canada

Web Developer Leader:

- **Chen**, **Yixiao,** University of Ottawa, Canada

Assistants:

- **Li**, **Yuenan,** University of Ottawa, Canada
- **Zhu**, **Qiming,** University of Ottawa, Canada

Secretariat Team:

Secretary General:

- **Kang, Yifan,** University of Ottawa, Canada

Deputy Secretary General:

- For China: **Lyv**, **Chunyan,** China Land Surveying and Planning Institute
- For UN-Habitat and Africa: **Huang**, **Zhengli,** Sheffield University, England

Volunteer Coordinator:

- **Wang, Sailan**, Southeast Minzu University, China

Assistants:

- **Chen**, **Xiao**, Southeast University, China
- **Liu**, **Kai**, Southeast University, China
- **Ma**, **Helen**, University of Ottawa, Canada
- **Zhang**, **Nico**, University of Ottawa, Canada
- **Zhao**, **Shengbo**, Southeast University, China

Special Assistant of Co-President/Sponsor Team Leader:

- **Guan**, **Haotian**, University of Ottawa, Canada

Treasurer:

- **Liu**, **Vivian**, Health Canada

ICCCASU III Participants' Network

Name	Organization/Position	Country	Email Address
Akoa, Philippe Camille	Cameroon Official Delegation/FEICOM/ CEO	Cameroon	philakoa@yahoo.fr
Armelle, Ongolo	Cameroon Official Delegation/MINDDEVEL/ Head	Cameroon	nagecm@yahoo.ca
Amanibeni, Majid	Southwest Jiaotong University/ Professor	China/Iran	majid@swjtu.edu.cn
Anderson, David	Carleton University/ Graduate Student	Canada	davidanderson3@cmail.carleton.ca
Atias, Etai	Carleton University/ Graduate Student	Canada	etaiatias@cmail.carleton.ca
Badiane, Alioune	The Urban ThinkTank Africa -TUTTA/ President	Senegal	badianeal@yahoo.com
Beaulieu, Antoine	Université Laval/ PhD Student	Canada	antoine.beaulieu.3@ulaval.ca
Belay, Tegegne	Addis Ababa University/ Professor	Ethiopia	teg.gebre@gmail.com
Berridge, Joe	Urban Strategies Inc. / Partner/ Urban Planner	Canada	jberridge@urbanstrategies.com
Cain, Allan	Development Workshop/ Founding Director/ Architect	Angola	allan.devworks@angonet.org
Cao, Huhua	University of Ottawa/ Professor	Canada	caohuhua@uottawa.ca
Chen, Xiao	Southeast University/ PhD Student	China	level_cx@163.com
Chen, Yiping	Xiamen University/ PhD Student	China	ypchen@stu.xmu.edu.cn
Chen, Yuqi	China Land Surveying and Planning Institute/ Researcher	China	chyq82@163.com
Chumbow, Beban Sammy	Cameroon Academy of Sciences/Acting President/ Professor	Cameroon	sammybchumbow@yahoo.fr
Cishahayo, Jean Marie	University of Ottawa/ Researcher	Canada/Burundi	jm.cishahayo@uottawa.ca
Covo, David	McGill University/ Professor	Canada	david.covo@mcgill.ca
Croteau, Jean-Philippe	Shichun University/ Professor	China/Canada	jeanphilippecroteau@hotmail.com
Dan, Zhen	Hebei GEO University/Graduate Student	China	764211130@qq.com

David, Jeff	Consulate General of Canada in Chongqing, China/ Consul General	Canada	Michael.Dodd@international.gc.ca
Danja, Isah Ibrahim	Southeast University/ PhD Student	China/Nigeria	danjaisah@yahoo.com
Dodd, Michael	Consulate General of Canada in Chongqing, China/ Consul (Political/Economic)	Canada	Michael.Dodd@international.gc.ca
Ketcha Courtes, Célestine	Cameroon Official Delegation/ Head Ministry of Housing and Urban Development (MHUD)/ Minister	Cameroon	foudabay@yahoo.fr
Fan, Haijiao	Inner Mongolia Land surveying and Planning Institute/ Land Surveyor	China	715464143@qq.com
Fopa Langouo, Georges Bertrand	Cameroon Official Delegation/ Research Assistant	Cameroon	foudabay@yahoo.fr
Fouda Owoundi, Anne Marguerite	Cameroon Official Delegation/ Studies, Planning and Cooperation Division of MHUD/ Head	Cameroon	foudabay@yahoo.fr
Fu, Bojie	Member of Chinese Academy of Science	China	lvchy@126.com
Gao, Xiang	Beijing Sun-Golden Technology Co., Ltd./ CMO	China	gaoxiang@sun-golden.com
Gianni, Benjamin	Carleton University/ Professor	Canada/United States	benjamin_gianni@carleton.ca
Guo, Liang	Chengdu Land Planning and Cadastre Centre/ Engineer	China	22718478@qq.com
Guo, Xiangmin	Harbin Institute of Technology/ Professor	China	xiangminguo@hit.edu.cn
Guo, Xudong	China Land Surveying and Planning Institute/ Key Laboratory of Land Use, Ministry of Land Resources/ Director/ Researcher	China	sam9560@vip.sina.com
Han, Lu	Zhejiang University of Finance & Economics/ Researcher	China	hanlu@zufe.edu.cn
Han, Ruibo	University of Maryland/ Center of Geospatial Science/ Director of Programs	United States/ Canada	ruibo@umd.edu
Hao, Jikun	Hebei Institute of Land Resources Utilization and Planning	China	274211271@qq.com
Hu, Jie	Chengdu Land Planning and Cadastre Centre/ Engineer	China	294536796@qq.com
Huang, Zhengli	University of Sheffield/ Researcher	United Kingdom	jeringhuang@gmail.com
Ishenda, Doris	Hohai University/ PhD Student	China/Tanzania	ishenda@yahoo.co.uk

Jiang, Peiling	Sichuan Institute of Land Surveying and Planning/ Researcher	China	172188601@qq.com
Kang, Yifan	University of Ottawa/ PhD Student	Canada	ykang027@uottawa.ca
Kebede, Getahun Fenta	Addis Ababa University/ Professor	Ethiopia	getahun.fenta@aau.edu.et
Kenfack Zankia, Winnie Audrey	LTC & Partners (Architecture Firm)/ Architect	Cameroon	kenfackwinnie@yahoo.fr
Li, Gaoxiang	University of Ottawa/ Researcher	China	Carson.graduate@gmail.com
Li, Huanqing	Research Center for the Urban Underground Space/ Researcher	Canada	huanqing.li@outlook.com
Li, Jiannan	Chongqing Institute of Surveying and Planning for Land, Resources and Housing/ Engineer	China	809375706@qq.com
Li, Xiaolong	Zhejiang University/ PhD Student	China	lockxylando@hotmail.com
Li, Xiaojiang	China Urban Planning and Design Institute/ Former Director General	China	lvchybj@126.com
Li, Yangfan	Xiamen University/ Professor	China	yangf@xmu.edu.cn
Li, Jinlu	Hebei Institute of Land Resources Utilization and Planning/Director General	China	hebeidiji@126.com
Li, Sha	Baoding Land and Resources Utilization Affairs Center	China	1011378911@qq.com
Li, Zhi	Chengdu Land Planning and Cadastre Centre	China	1610115960@qq.com
Li, Zhe	Chengdu Land Planning and Cadastre Centre/ Engineer	China	turelizhe@qq.com
Li, Zhe	Hebei Institute of Land Resources Utilization and Planning/ Land Surveyor	China	727590681@qq.com
Liang, Jie	Inner Mongolia Land Surveying and Planning Institute/ Land Surveyor	China	43683775@qq.com
Ling, Ling	Inner Mongolia Land Surveying and Planning Institute/ Land Surveyor	China	465491929@QQ.COM
Liu, Ying	Jiangxi Provincial Land and Resources Survey and Planning Institute	China	2016587659@qq.com
Liu, Li	Chengdu Land Planning and Cadastre Centre/ Engineer	China	792478932@qq.com
Liu, Kai	Southeast University/ PhD Student	China	liukaiseu@seu.edu.cn
Liu, Shouying	Renmin University of China/ Professor	China	Liusy18@126.com

Liu, Xiang	Sichuan Institute of Land Surveying and Planning/ Researcher	China	112792720@qq.com
Liu, Zheng	Baoding Land and Resources Utilization Affairs Center	China	453172882@qq.com
Lu, Xuejun	Chinese Academy of Sciences/Institute of Geography Sciences and Natural Resources Research/ Professor	China	43448041@qq.com
Lu, Qi	Chengdu Land Planning and Cadastre Centre/ Engineer	China	1610115960@qq.com
Lyu, Chunyan	China Land Surveying and Planning Institute/ Researcher	China	lvchybj@126.com
Ma, Huier	University of Ottawa/ Graduate Student	Canada	hma058@uottawa.ca
Ma, Ling	University of Toronto/ Student	Canada	lingkelly.ma@mail.utoronto.ca
Ma, Sicong	University of Ottawa/ PhD Student	Canada	sma068@uottawa.ca
Ma, Tianhang	Hebei Normal University/ Student	China	405880527@qq.com
Maatchi Raye, Ntafam Audrey	Urban and Rural Land Development and Equipment Authority/ Design Engineer	Cameroon	audreymaatchi@gmail.com
Mawenda, John	Hokkaido University/ Graduate Student	Japan/Malawi	mawendaj@gmail.com
Mbwentchou, Jean Claude	Ministry of Housing and Urban Development/ Former Minister	Cameroon	claude.ngomsi@un.org
Meng, Ying	Southwest Minzu University/Faculty of Urban Planning & Architecture/ Deputy Dean	China	My19739@163.com
Menye Me Noah, Fabrice	Cameroon Official Delegation/ FEICOM	Cameroon	menyemenoah@yahoo.fr
Mosha, Aloysius	Ba Isago University, Gaborone/ Professor	Botswana	moshaac@gmail.com
Mwai, Angela	UN-Habitat/Gender Equality and Human Rights Unit/ Head	Kenya	angela.mwai@un.org
Mundele, Tonton	Global Affairs Canada/ Trade Commissioner	Canada	mundeletonton@gmail.com
Nahiduzzaman, Kh Md	University of British Columbia/ Professor	Canada/Bangladesh	Kh.Nahiduzzaman@ubc.ca
Ndzana, Arnauld Philippe	Cameroon Official Delegation	Cameroon	arnauldndzana@yahoo.fr
Ngomsi, Claude	UN-Habitat/ Senior Officer/Researcher	Kenya/Cameroon	claude.ngomsi@un.org
Noukoua, Jean Calvin	Cameroon Official Delegation/ Cooperation and Cities Contract Unit/ Head	Cameroon	foudabay@yahoo.fr

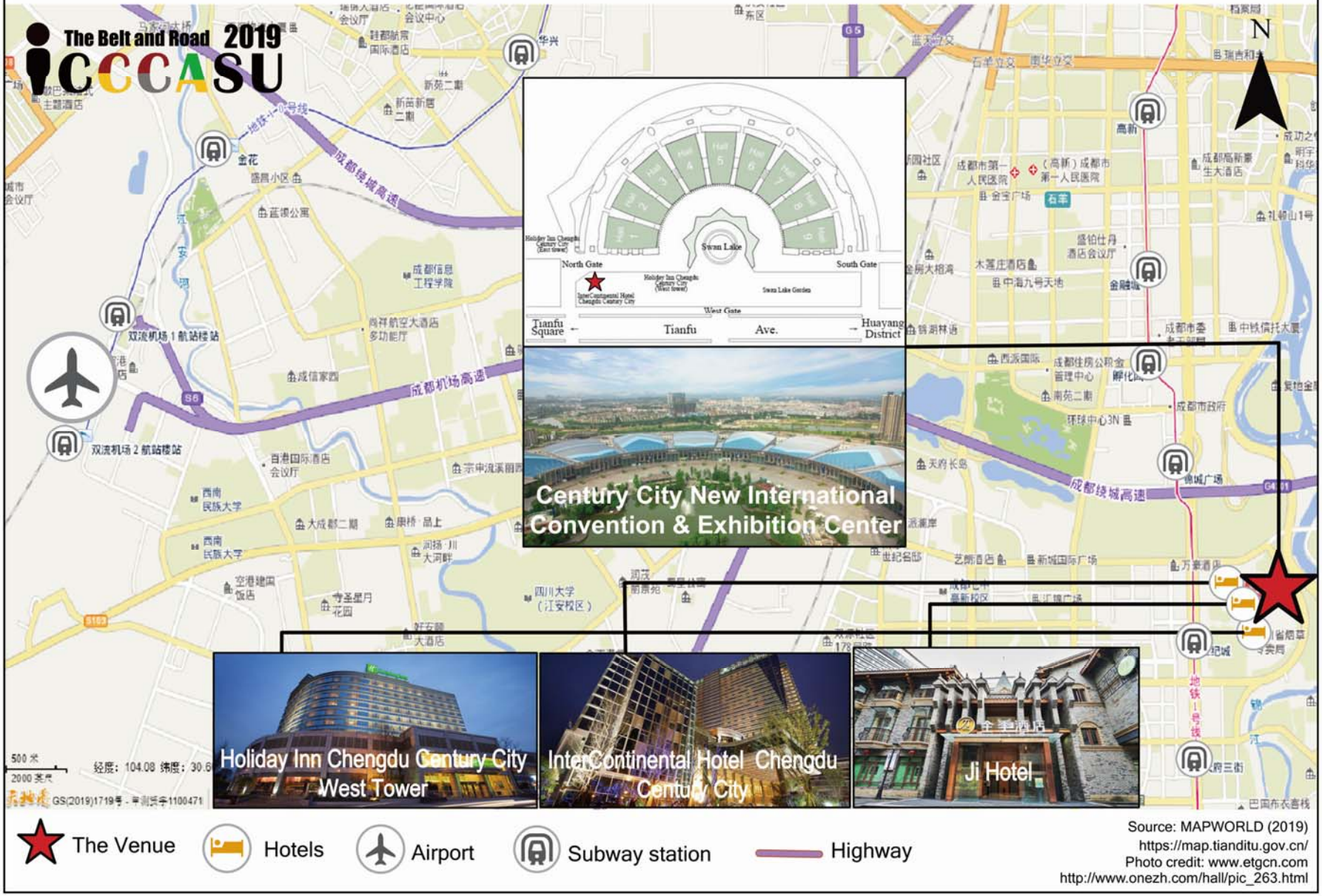
Noubouwo, Antoine	City of Gatineau/ Urban Planner/ Researcher	Canada	anoubouw@uottawa.ca
Nunes, Alice	Eduardo Mondlane University/ Researcher	Mozambique	zuaalice@gmail.com
Ogra, Aurobindo	University of Johannesburg/ Professional Planner	South Africa	aogra@uj.ac.za
Onatu, George	University of Johannesburg/ Researcher	South Africa	gonatu@uj.ac.za
Pan, Yaozhong	Beijing Sun-Golden Technology Co., Ltd./ Senior Advisor	China	gaoxiang@sun-golden.com
Pondi Batoum, Paul Dieudonné	Urban and Rural Land Development and Equipment Authority/ Head of the Studies and Strategy Department	Cameroon	pondibat@yahoo.fr
Siyam, Sylvie	Cameroon Official Delegation/ FEICOM	Cameroon	pegmidebana@gmail.com
Ren, Qian	Sichuan Institute of Land Surveying and Planning/ Researcher	China	1780032008@qq.com
Qin, Peng	Qingdao Agriculture University/ Researcher	China	qpwade@163.com
Ren, Zhibin	Northeast Institute of Geography and Agroecology/ Chinese Academy of Sciences/ Researcher	China	renzhibin1985@163.com
Rosmadi, Amalia	Shanghai Jiaotong University/ PhD Student	China/Malaysia	amalia5388@sjtu.edu.cn
Salldou, Adama	Cameroon Official Delegation/ Promotion of Sustainable Development/ Director	Cameroon	foudabay@yahoo.fr
Sant'Anna, Marcus	Federal University of Viçosa (Brazil)/ Professor	Brazil	santannamv@outlook.com
She, Yan	Jiangxi Provincial Land and Resources Survey and Planning Institute	China	402716291@qq.com
Sietchiping, Remy	UN-Habitat/ Regional and Metropolitan Planning Unit/ Head	Kenya/Cameroon	remy.sietchiping@un.org
Simon, Huang	University of Ottawa/ IT Engineer	Canada	simonits@outlook.com
Siyam, Sylvie	Cameroon Official Delegation/ FEICOM	Cameroon	pegmidebana@gmail.com
Sun, Leigang	Hebei Academy of Sciences/ Researcher	China	sunleigang3s@163.com
Tchinda, Paul Emile	Urban and Rural Land Development and Equipment Authority/ Architect	Cameroon	tchindapaule@gmail.com
Tchotsoua, Michel	University of Ngaoundere/ Professor	Cameroon	tchotsoua@gmail.com

Tian, Yuming	Shanghai University/ Student	China	13901601536@163.com
Togolo, Jean Pierre	University of Yaounde I/ Lecturer	Cameroon	jtogolo86@gmail.com
Tuts, Rafael	UN-Habitat/Programme Division/ Director	Kenya/Belgium	Raf.Tuts@unhabitat.org
Wang, Hong	Shanghai University/ Professor	China	13901601536@163.com
Wang, Huaming	Xi'an Jiaotong University/ Graduate Student	China	melody19701@hotmail.com
Wei, Liang	Shijiazhuang Land Use Planning Institute/ Engineer	China	sjzlup@163.com
Wang, Lin	Hebei Institute of Land Resources Utilization and Planning/ Land Surveyor	China	1018509140@qq.com
Wang, Qian	Hebei Institute of Land Resources Utilization and Planning/ Engineer	China	401129647@qq.com
Wang, Sailan	Southwest Minzu University/Faculty of Urban Planning & Architecture	China	14795748@qq.com
Wang, Xiaofan	China Land Surveying and Planning Institute/Key Laboratory of Land Use, Ministry of Land Resources/ Researcher	China	wangxf.10s@igsnrr.ac.cn
Wang, Xingping	Southeast University/ Research Institute of Region and Urban Development/ Director	China	wxpsx@seu.edu.cn
Wilczak, Jessica	University of Lausanne/ Researcher	Switzerland	jessica.wilczak@unil.ch
Wu, Wei	Nanjing Agricultural University/ Professor	China	ww@njau.edu.cn
Wu, Yaojun	Shanghai Jiaotong University/ Researcher	China	wuyaojunkylin@outlook.com
Wu, Jiang	Tongji University/ Vice-President	China	xin_wang@tongji.edu.cn
Xiao, Qiong	Southwest Minzu University/School of International Education/ Deputy Dean	China	16645809@qq.com
Xu, Jiabo	Southeast University/ PhD Student	China	xu_jiabo@sina.com
Xu, Jin Cai	Inner Mongolia Land Surveying and Planning Institute	China	liangjie1985@foxmail.com
Xu, Yuan	Sichuan Institute of Land Surveying and Planning/ Researcher	China	416394515@qq.com
Xue, Honggang	Lanzhou Jiaotong University/ Graduate Student	China	1137462294@qq.com

Yan, Yiran	Southeast University/ PhD Student	China	yanyiran1127@163.com
Yan, Xiaona	Harbin Institute of Technology/ Graduate Student	China	1097413578@qq.com
Yang, Shengli	Shijiazhuang Land Use Planning Institute/ Engineer	China	sjzlup@163.com
Yang, Min	Sichuan Institute of Land Surveying and Planning/ Researcher	China	313456968@qq.com
Yang, Rong	UN-Habitat/Programme Division/ Inter-Regional Advisor	Kenya/China	rong.yang@unhabitat.org
Yao, Xijun	Inner Mongolia Land Surveying and Planning Institute/ Land Surveyor	China	yaoxj83@163.com
Yemeru, Edlam	United Nations Economic Commission for Africa/ Chief of Urbanization Section	Ethiopia	yemeru@un.org
Yu, Xiao	China Land Surveying and Planning Institute/ Researcher	China	xxy_3@126.com
Yu, Fan	Beijing University of Civil Engineering and Architecture/ Professor	China	yufan@bucea.edu.cn
Yue, Wenze	Zhejiang University/ Professor	China	wzyue@zju.edu.cn
Zacharias, John	Peking University/ Chair Professor/1000 Scholar	China	johnzacharias@pku.edu.cn
Zander, Patricia	University of Strasbourg/ Professor	France	patricia.zander@unistra.fr
Zeng, Jue	China Land Surveying and Planning Institute/ Deputy Director General	China	598722949@qq.com
Zhao, Bing	Southwest Minzu University/Faculty of Urban Planning & Architecture/ Dean	China	21900004@swun.edu.cn
Zhang, Jingxiao	Chang'an University/ Professor	China	zhangjingxiao964@126.com
Zhang, Xiaoling	China Land Surveying and Planning Institute/ Chief Engineer	China	lvchybj@126.com
Zhang, Lulu	Chongqing Institute of Surveying and Planning for Land Resources and Housing/ Engineer	China	760938667@qq.com
Zhao, Yawei	University of Calgary/ PhD Student	Canada	yawei.zhao@ucalgary.ca
Zhao, Dan	Beijing Municipal Institute of Urban Planning and Design/Urban Planner	China	499087263@qq.com
Zhao, Shengbo	Southeast University/ PhD Student	China	victzhao2nj@163.com
Zheng, Caigui	Chongqing Institute of Surveying and Planning for Land Resources and Housing/ Deputy Director General	China	26554853@qq.com

Zhu, Qiming	University of Ottawa/ Student	Canada	qzhu044@uottawa.ca
Zhu, Weiping	Hangzhou Zhongwei Electronics Co., Ltd./ Vice-President	China	13906521248@139.com
Zou, Qiang	Southeast Municipal Engineering & Research Institute of China/ Engineer	China	469453623@qq.com

Venue



Source: MAPWORLD (2019)
https://map.tianditu.gov.cn/
Photo credit: www.etgcn.com
http://www.onezh.com/hall/pic_263.html

Venue Floor Plan

The Belt and Road 2019 ICCCASU

UN HABITAT
FOR A BETTER URBAN FUTURE

ICCCASU

3rd International Conference on Canadian, Chinese & African Sustainable Urbanization

第三届中国．非洲和加拿大可持续城市化国际论坛

Join Us in Chengdu, China in July 2019

二零一九年七月相约中国成都

一带一路

One Belt One Road 2019

ICCCASU

www.ICCCASU.org & www.ICCCASU.com