



2023年9月6日-8日 中国北京

Session title: Accelerating The Urban SDGs Monitoring and Implementation Through Digital Technologies and Big Data Applications: Experiences from SDG 11

Session Organizer: United Nations Human Settlements Programme (UN-Habitat)

Short Description

Our ability to effectively implement the sustainable development goals (SDGs) significantly depend on how well we measure where we have come from and where we are, as well as how we use the emerging findings to inform the required actions/interventions towards the targets set out in the 2030 agenda. With 231 unique indicators within the SDG framework, measuring the status of each can be a daunting task for any government, especially if emerging technologies are not adopted. To address this, the SDG indicators monitoring framework recommends the integration of non-conventional approaches into data collection processes, some of which include Earth Observation and Geospatial Information, big data analytics, community led data initiatives among others.

This session will discuss how the emerging technologies are contributing to accelerated monitoring and data driven decision-making against the SDG 11. It will specifically showcase and discuss some of the most recent digital technologies and approaches, ongoing crowd sourcing and open data initiatives, available big data resources as well as participatory processes and how each is contributing to SDG 11 monitoring and better understanding of urban systems for informed decision making.

Objectives

This session will showcase the contribution of geospatial, crowd sourcing, volunteered data and other emerging technologies in accelerated monitoring and implementation of the urban sustainable development goals.

Expected Results

Through this session, we expect to achieve the following outcomes

- 1. Showcase ongoing initiatives around the application of emerging technologies in the measurement urban sustainability
- 2. Triger discussions among participants around how to further leverage the emerging technologies for urban performance measurement and data-driven decision making, including the identification
- 3. Identify potential partnerships and collaborations to further enhance urban monitoring efforts at local, national, regional and global levels.



Agenda

Time 10:30-12:00, September 7th 2023 Room: 305 B



Moderator: Robert Ndugwa Head Data and Analytics Section, UN-Habitat

Dr. Ndugwa is the head of the Data and Analytics Section at UN-Habitat where he oversees the global monitoring and reporting on the SDGs and the New Urban Agenda. He also doubles as the technical lead for urban statistics within UN-Habitat where he has led several initiatives such as the Global Urban Monitoring Framework development, National sample of cities programme, earth observation toolkit for sustainable cities and human settlements, and urban observatories. Robert has authored various reports and papers in peer reviewed journals.

Participants:

Event 1

Earth observations and urban monitoring: local to global applications from the earth observation toolkit for sustainable cities and human settlements.



BAN Yifang KTH Royal Institute of Technology

Dr. BAN Yifang is the Professor and Director of the Division of Geoinformatics at the Department of Urban Planning and Environment at KTH Royal Institute of Technology, and an Associate Director - Dissemination and Impact at Digital





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Futures in Stockholm, Sweden. Before joining KTH in 2004, Dr. Ban was a tenured Associate Professor at York University in Toronto, Canada. She received her PhD degree from the University of Waterloo in Canada.

Professor Ban's research has been focused on Earth observation big data analytics, machine learning/deep learning, and their applications in environmental change monitoring (e.g. urbanization, wildfires, flooding) to support sustainable and resilient development. She has published extensively on these topics. Professor Ban is the PI/Co-PI for a number of impactful projects, including EO-AI4GlobalChange (funded by Digital Futures), HARMONIA (funded by EU H2020), SAR4Wildfire (funded by FORMAS & ESA), and Climate Change Induced Disaster Management in Africa (funded by EU Erasmus+). She is also a co-chair of the ICA Commission on Sensor-Driven Mapping, a co-lead of the GEO initiative 'Global Urban Observation and Information' (2012-2022), an associate editor and guest editor of major remote sensing journals, and a committee member of major international remote sensing conferences.

Event 2

Crowd sourcing and big data accelerating SDG 11 monitoring - experiences from OSM



Nasilele Amatende Mwiimbwa Global Partnerships Manager Humanitarian OpenStreetMap Team

Nasilele is the Global Partnerships Manager at HotOSM. Her background is in Geographical Information Systems (GIS) and remote sensing, with experience in research, planning, monitoring and evaluation in both public and private sectors. She is a specialist in spatial analysis of local population dynamics using Census and Survey data. Her professional experience over the years has exposed her to mainstreaming of cross cutting issues, such as education, health, migration, urbanization and sanitation, into research for effective organizational performance and it has driven her passion of serving for sustainable development.

Nasilele's interests are in health, food security, GIS, remote sensing and artificial intelligence. She also loves to teach people about GIS in the most simplified ways to tackle some of the global challenges.

Event 3

Future perspectives on application of big data for urban monitoring. CBAS representative - TBD