



Catalyzing Innovation

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
WASHINGTON DC, MARCH 25-29, 2019



Land and Poverty Conference 2019 Masterclass on

SESSION 13-04 | Using drones for land use mapping and risk assessment

Friday, March 29, 2019 | 1:30 pm – 3 pm | MC 8-100, World Bank

INSTRUCTORS

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MASTERCLASS SUMMARY

Rapid urbanization is causing the disaster risk profile of countries in sub-Saharan Africa to change from predominantly rural—with drought and food security challenges—to predominantly urban, with floods, cyclone, and earthquakes. Africa's fast-growing cities are already struggling with natural hazards as climate change intensifies. A key challenge in risk reduction is the timely collection of actionable risk data.

Drones are proving to be an agile image collection platform with a significant potential to support land use mapping and risk assessment. In 2018, the Dar es Salaam Multi-Agency Emergency Response Team is requested a local drone company to collect imagery to identify flood damage. The Zanzibar Mapping Initiative over 2000 km² of drone imagery which is actively being used for coastal and environmental monitoring and urban planning.

But how exactly can drone data be translated into actionable information? In this master class, we will illustrate examples from Tanzania which demonstrate how participatory mapping and AI technologies can be effectively leveraged to transform aerial drone imagery into actions on the ground.

Targeted audience: DRM and Geospatial practitioners, TTLs, government and NGOs.

Actions required: None



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MASTERCLASS PROGRAM

1. Introduction

Why risk assessments are data-hungry, and how drones can help. An introduction to drone campaigns for flood resilience in Dar es Salaam and the Zanzibar Mapping Initiative.

2. Presentations

- Humans in the loop for more resilient cities: the Open Cities Africa experience
- Applications: what is being done already and what else do we need
- Next steps: introducing Artificial Intelligence for more speed and scale

3. Discussion

An interactive session between panel experts and the audience discussing current limitations, emerging opportunities, and how to translate drone imagery into actionable information.