



# XXVII FIG CONGRESS

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## The emergence of Namibia OpenStreetMap Community, supporting GIS data generation for Informal Settlements

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## General background

- Informal settlements and exclusion are synonymous.
- The seemingly unconventional way informal settlements emerge automatically excludes such settlements from normative planning approaches.
- Limited data on informal settlement households protract planning processes and leads to low prioritization of development. This makes it a challenge for communities to access services.
- At most times the exclusion in planning is because of no-data on settlements.

## Data in Informal Settlements

- The first comprehensive data on informal settlements in Namibia was collected by the Shack Dwellers Federation of Namibia (SDFN) covering over 208 informal settlements over 13 regions.
- Community teams profiled the settlements and provided an overview on population, service access and tenure.
- This figure was updated in 2018, with estimates that 40% of the urban population is currently residing in informal settlements.
- .In decision making on informal settlements in Namibia one can say that authorities really on various sources of information, the data from the Namibia Statistics Agency is seen as the first option, followed by local level surveys and enumerations.

## OpenStreetMap



Informal Settlement OSM mapping and Field verification in Windhoek

## Take home points

- Youth participation instrumental in completing projects, participants in the mapping events were mostly from high schools within Windhoek. Many reside in the informal settlements identified for mapping.
- Availability of technology is highly reliant on university and NGO, creating data centres in communities can reduce the travel time for contributions. As teams must travel to NUST campus to digitize the data and later go into the settlements to verify.
- Use of data by local and national authorities, knowledge of the platforms can enable local authorities to download shapefiles directly from OSM using QGIS. This reduces any strain on resources.
- The use of data from the volunteer community of SDFN, youth mappers and mapathon participants, the study adds to new knowledge on the wealth of information available that can be integrated in Land Information Systems of Local Authorities.

## Opportunities for moving forward

1. The National Housing Information System creates an opportunity for integrating OSM within the database. Verifications can be made with local authorities. Town level mapping events can be organised.
2. Definition of Data and tagging, each area can identify important tags that can be prioritised for mapping. This can include amenities, street names etc.
3. Data verification and updating can be supported for informal settlements ready to implement upgrading projects.

## Taking the discourse forward

### INVITATION TO UPCOMING EVENTS

- FIG SPECIAL SESSION: Perspectives on urban-rural land governance for a spatially inclusive future - needs and actions for China(Re)structuring institutions and governance (15 September 8-10 am CET)
- CONFERENCE: Land governance and Societal Development Conference (Hybrid 8-11 November 2022)
- All events are facilitated by the Namibia University of Science and Technology (NUST) and the Hanns-Seidel Foundation, Shandong (China)
- Other partners: the GLTN and China Land Surveying and Planning Institute

# Thank you