



## Land Administration

### User

Lusaka, Zambia

### Challenge

Unplanned settlements in Lusaka were based on oral agreements that had no legal authority.

### Solution

Esri® tools were used to map the area and collect information on each of the area's land and property owners.

### Results

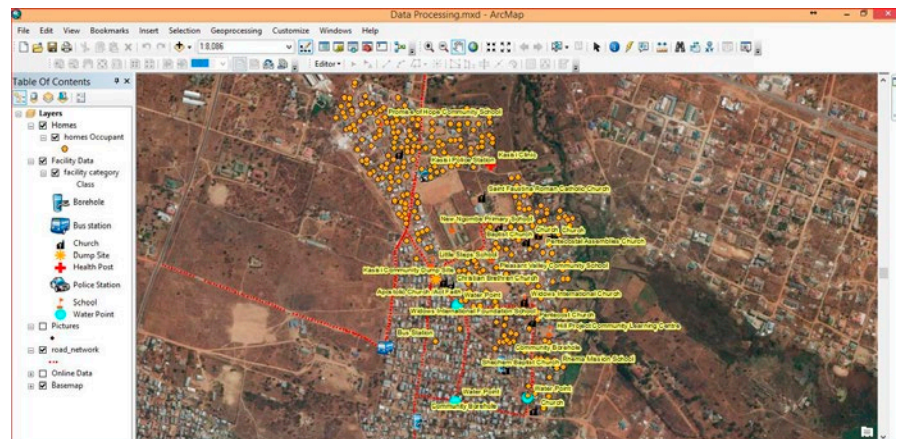
All information that was collected and mapped was integrated into Lusaka's GIS and Zambia's tax system, officially securing all residential tenure and adding it to the legal system.

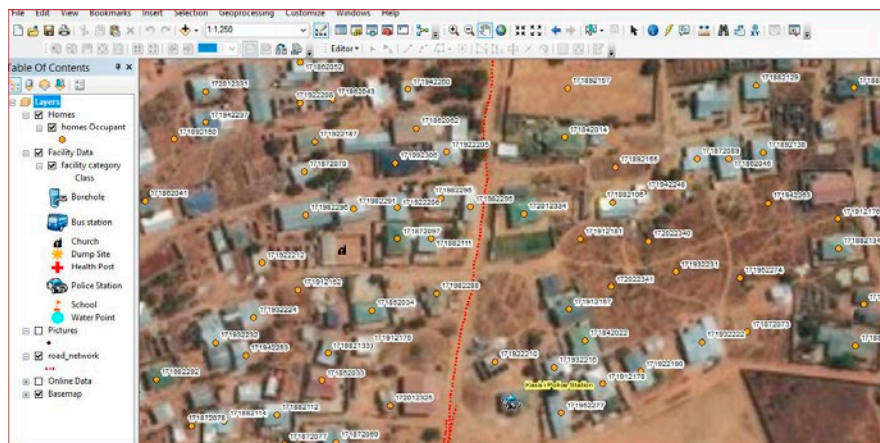
# Zambian Settlement Secures Tenure for All Residents

MEDEEM is a social impact and land documentation company that supports councils facing the challenges of unplanned settlements and seeks to bridge the gap in tenure documentation.

## The Challenge

Lusaka, Zambia, has an unplanned settlement called Ng'ombe-Kasisi that had limited opportunity to grow economically. To grow, its landowners needed their property rights legitimized by being officially included in the country's legal system. MEDEEM needed to create a way to record and secure land tenure for the settlement's residents by digitally mapping the settlement's parcels and integrating the data into Lusaka's geographic information system (GIS). Over





years, oral land agreements that had no legal weight had accumulated, and they presented an obstacle to creating a system of record that proved residential ownership and connected electronically to Zambia’s tax system.

## The Solution

MEDEEM equipped surveyors with Parcel Surveyor, a mobile app based on ArcGIS® software, which enabled surveyors to canvass Ng’ombe-Kasisi and gather core information about each of the settlement’s dwellings. The residents’ biographical and socioeconomic data was gathered using ParcelEye, which is a proprietary workflow and iOS mobile data collection system. ParcelEye also collected pertinent land tenure information from clients as well as testimony from neighbors who share boundaries with the clients’ lands. That information was then integrated into Esri’s parcel fabric technology, which is a purpose-built COTS solution for parcel management. Each of the settlement’s properties was mapped and managed in the parcel fabric, including ownership, coordinates, and parcel history attributed in a simple map layer that could be edited on the fly. The resultant data collected was synced to ArcGIS Online and made available to local council staff and partner agencies through Esri’s Operations Dashboard for ArcGIS.

## The Results

All information that was collected and mapped was integrated into Zambia’s GIS, officially securing all residential tenure data and added it to the legal system. Bringing the settlement’s residents into Zambia’s legal system reduced the complications of replanning and upgrading, and helped make the area more habitable.

“MEDEEM provided a cost-effective, demand-driven approach [for securing tenure] to those who have [lived on their land] for years with only oral agreements.”

**Mboyonga Kaputula**  
Land Survey—Lusaka City Council



Learn More about ArcGIS for Land Administration: [go.esri.com/medeem](https://go.esri.com/medeem).