

GARC Data Logger

A tools to capture data at the point of vaccination

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4th Middle East, Eastern Europe, Central Asia and North Africa

Rabies Expert Bureau (MEEREB) Meeting

Les Pensieres Center For Global Health, Veyrier-du-Lac - France

23 – 25 April 2018



Background information

GARC Data Collector

Background

- Data collection is often difficult, especially during vaccination campaigns
 - There is little time for vaccinators to gather data while vaccinating
- Often a dedicated data capturer is required
 - Costly
- Need a simple, yet comprehensive, data collection method became evident

Background

- A proposed solution to the barriers was presented at the inaugural PARACON meeting (2015)
- The proposed data collection device (“clicker devices”) was based on hardware collecting basic vaccination data in a short period of time

Proposed solution: Clicker system



GARC Data Logger

- Development started in January 2016
- Initial testing and revisions between June 2016 and January 2017
- Currently being used in two project sites (Zimbabwe and Zanzibar)



Hardware Advantages

- High memory capacity (stores 500 records)
- Durable
- Lightweight
- Easy-to-use (even by vaccinator)
- Easily waterproofed (works through a plastic bag)
- Can be used with a nitrile/latex glove
- Simple micro-USB charge – can be charged off of a standard smartphone charger, from wall socket or laptop

Connectivity Advantages

- Works solely on GPS with satellite triangulation
 - Not reliant on mobile network
 - No data/internet access required
 - No running cost
- Can be used in the most remote areas
- Data stored on device until download onto computer

Data Collection

- **Inputted data** (via 3 questions each with 2 options each)
 - Vaccination: Dog/Cat; Adult/Juvenile; Male/Female
- **Automatically collects:**
 - Time
 - Date
 - GPS coordinates



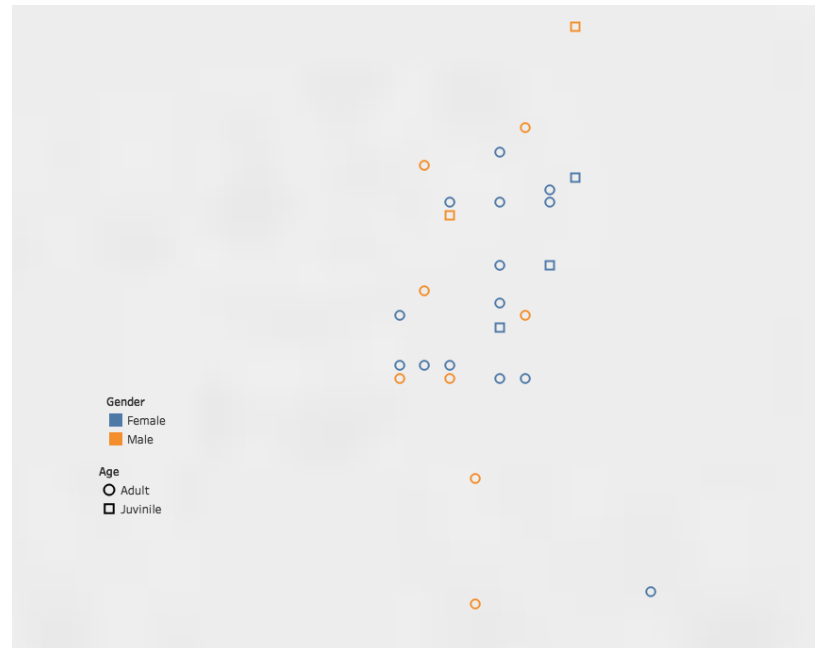
Software Advantages

- Can be run on any Windows compatible computer



- Data outputs in **Excel and CSV format**
 - Easy to create quick graphs and output
 - Rabies-related data can be uploaded directly to the Rabies Epidemiological Bulletin
 - Compatible with most reporting bulletins and programmes (GIS, Google maps, etc.)

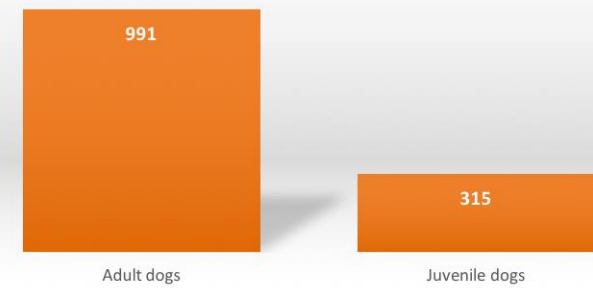
GDL data – Excel format



Dogs vaccinated, disaggregated by sex



Dogs vaccinated, disaggregated by age



GDL data – CSV format

Browser address bar: <https://bulletin.rabiesalliance.org/dhis-web-dashboard-integration/index.action>

dhis2 Global Alliance for Rabies Control - Epidemiological Bulletin Search apps TS

Write feedback • Zanzibar

Profile Messages Interpretations Search ⚙

Add Manage Share < > Uganda Zanzibar Zimbabwe

Remove | Resize | Explore | Share interpretation 0

RDC data_Zan_MDV_01-08-2017_

OpenStreetMap, CartoDB

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Total number of rabies samples diagnosed per animal species

Zanzibar Archipelago

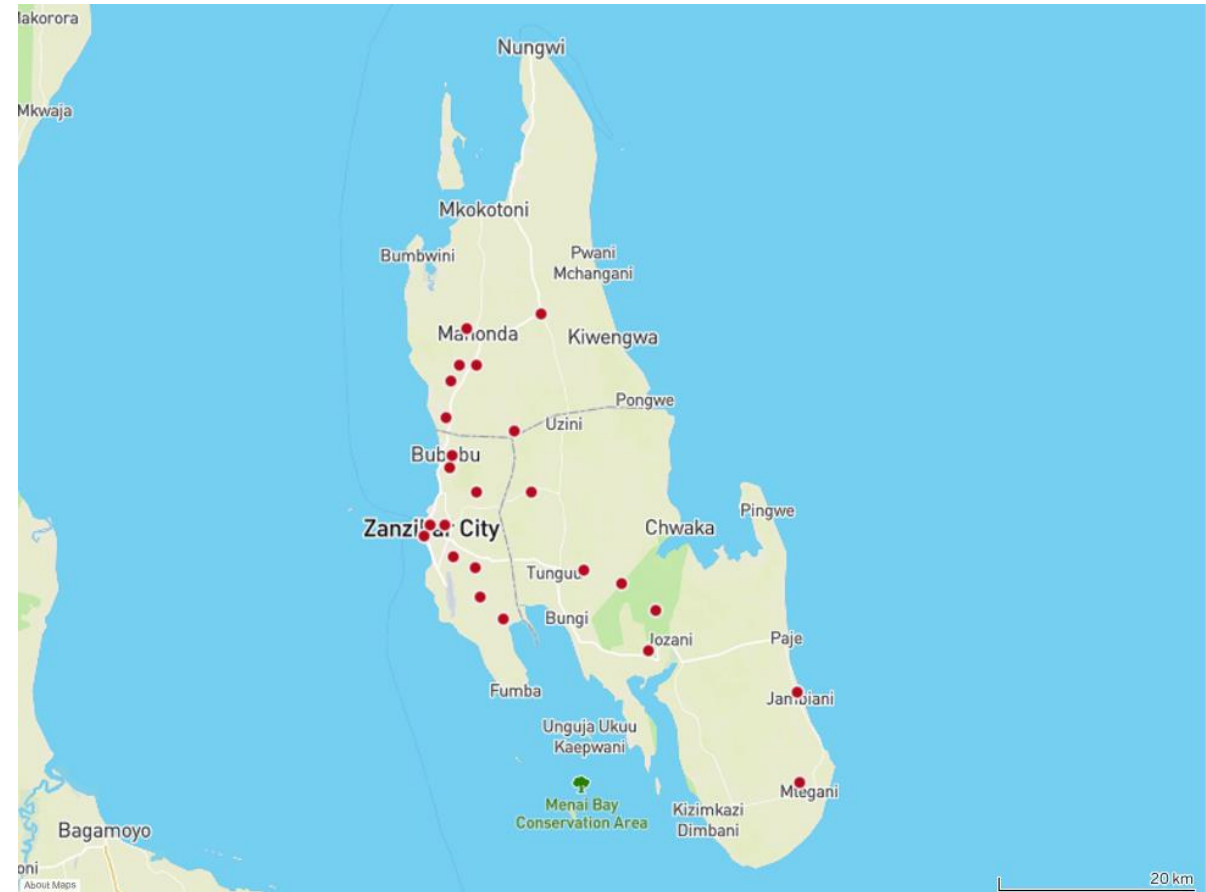
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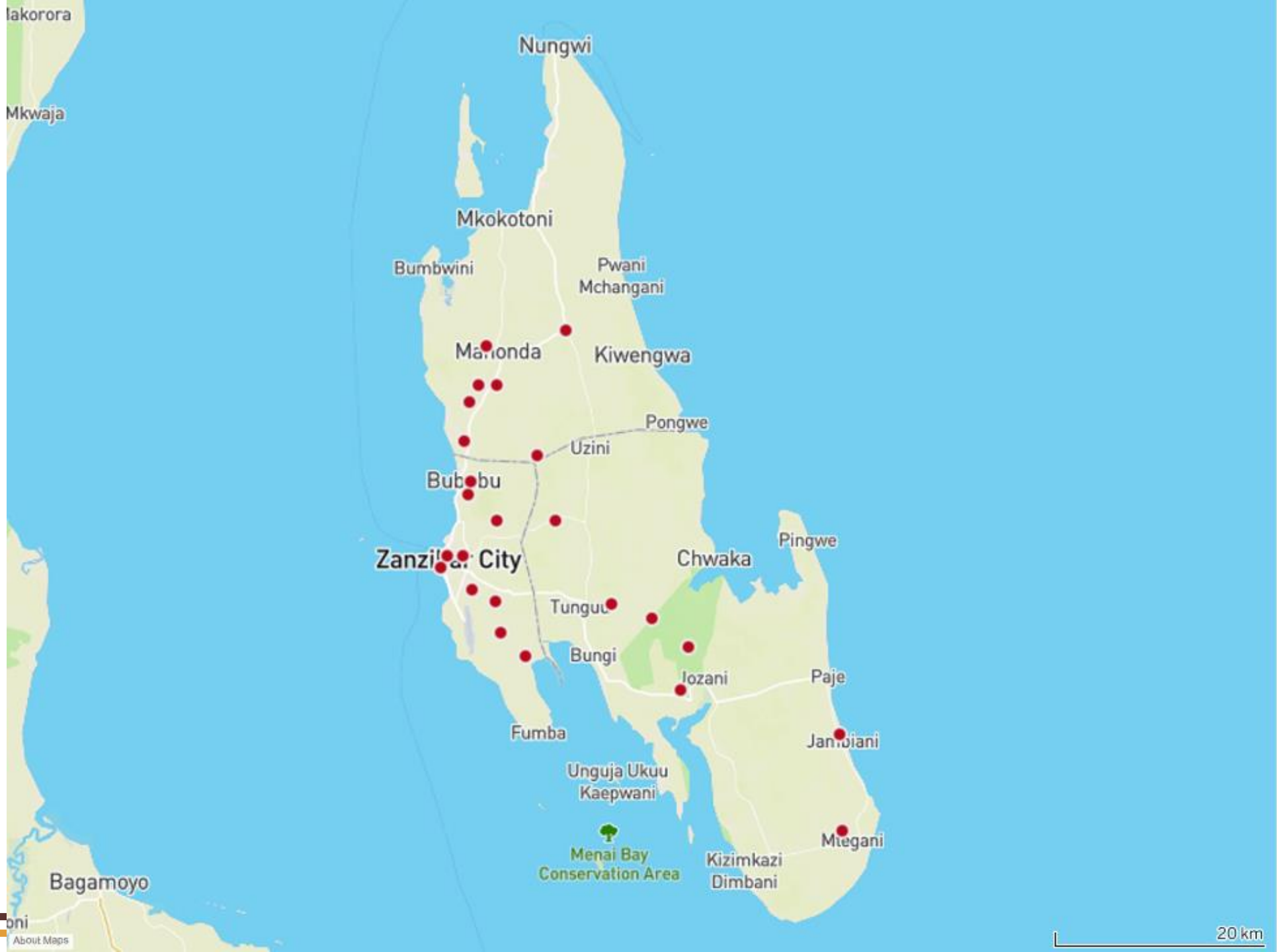
GDL usage

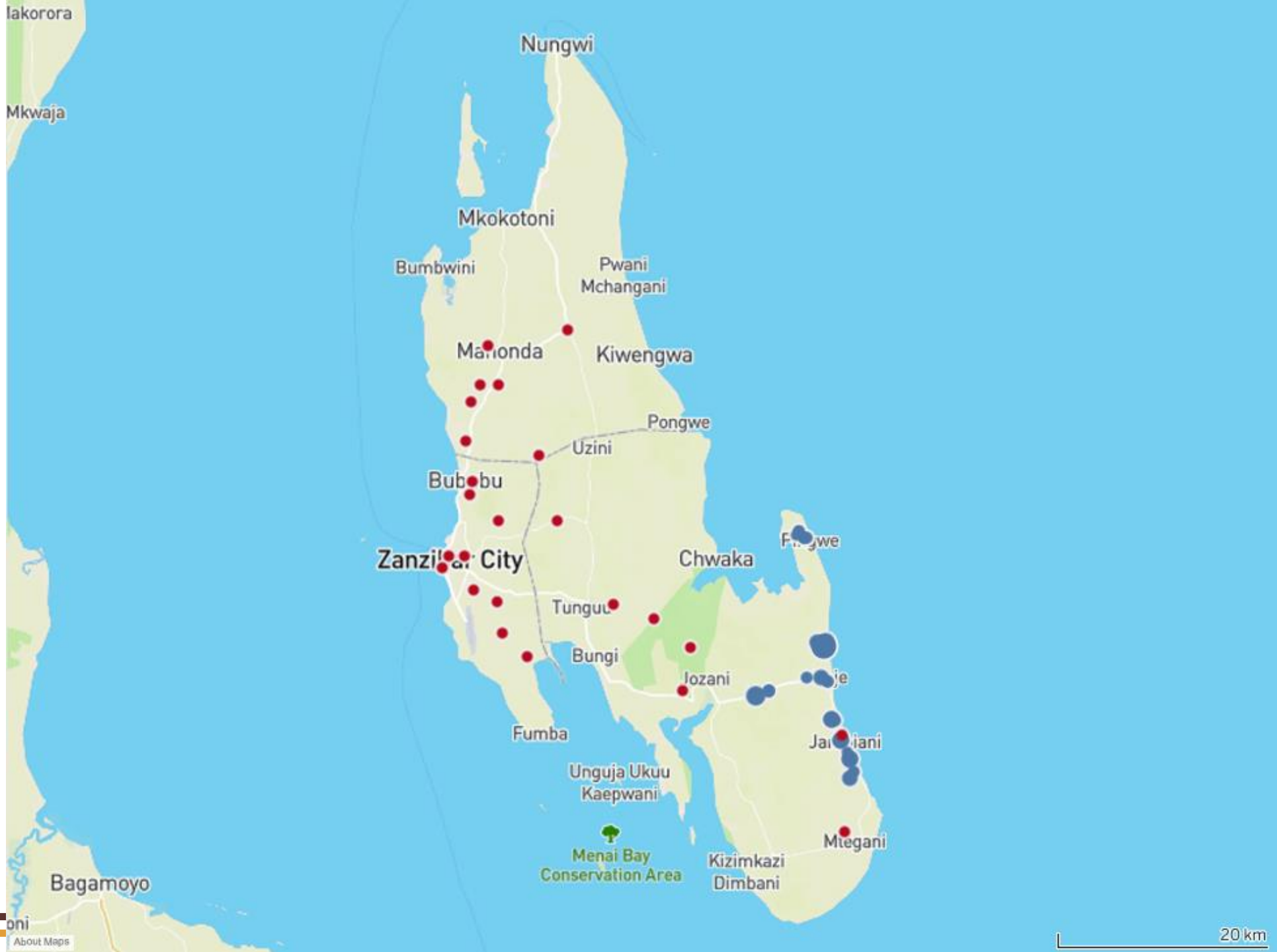
Zanzibar island – mass dog vaccination

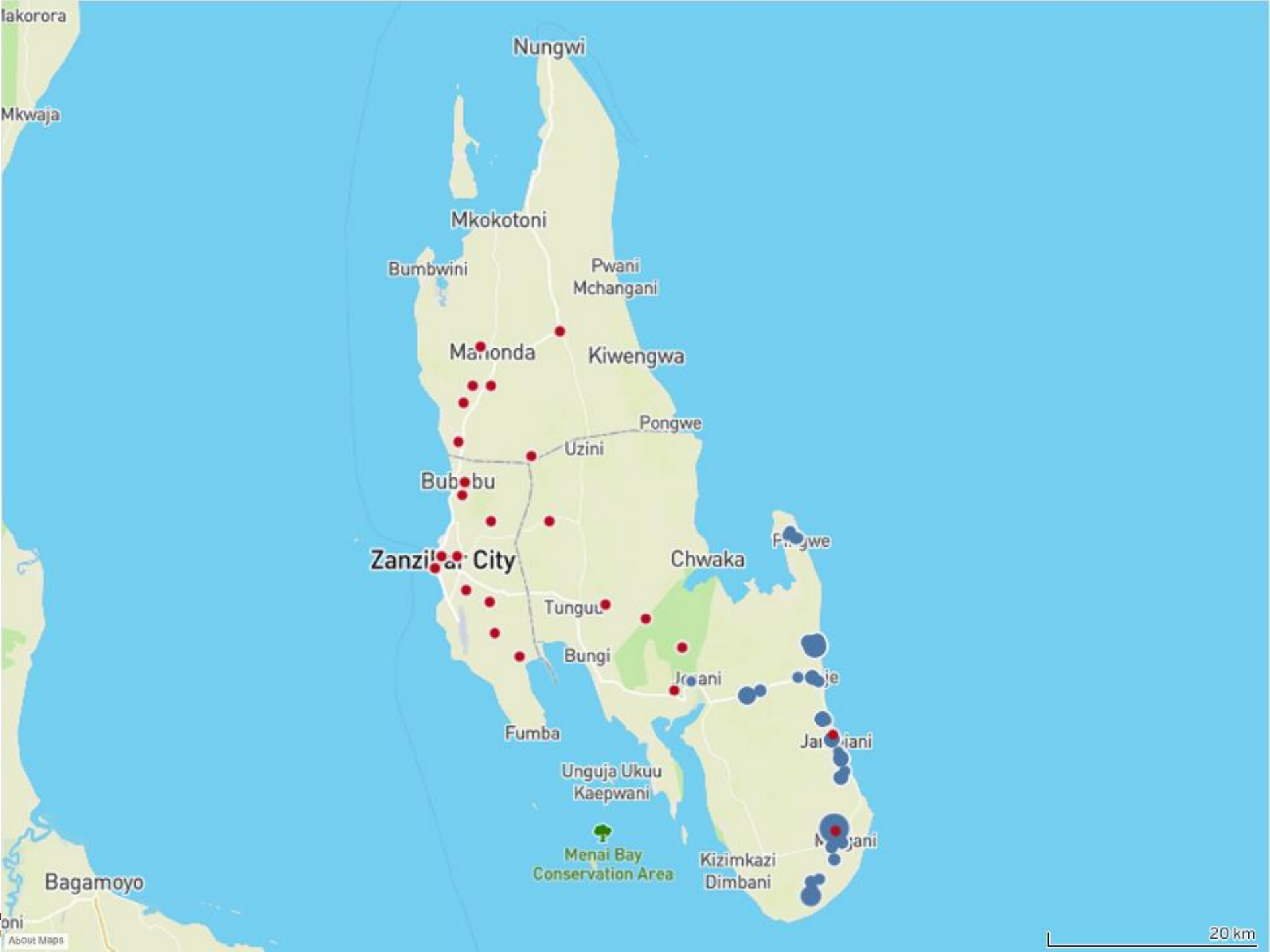
Zanzibar island

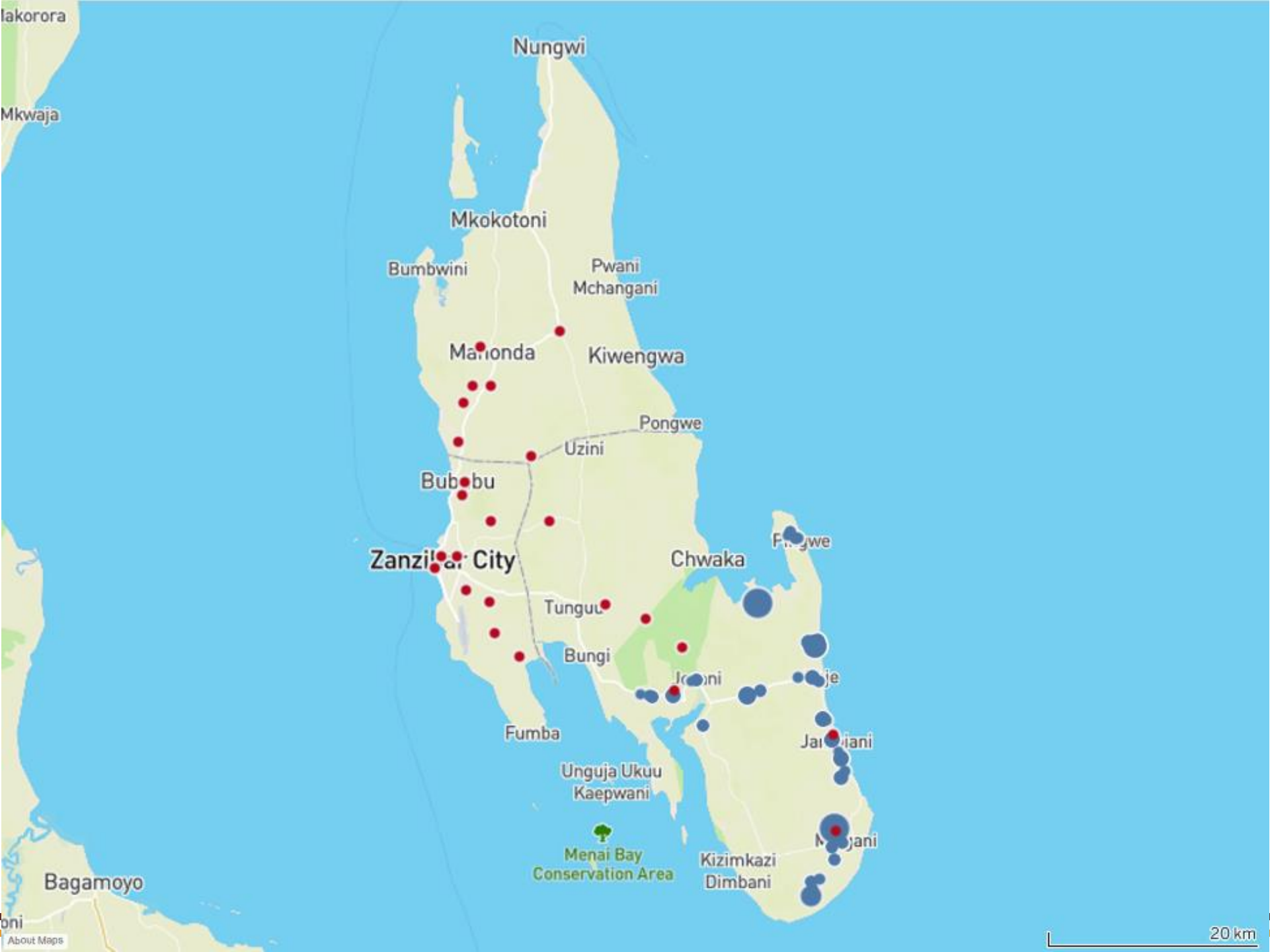
- Surveillance established in 2016
- Canine-mediated rabies confirmed
- All of the districts on the island are endemic

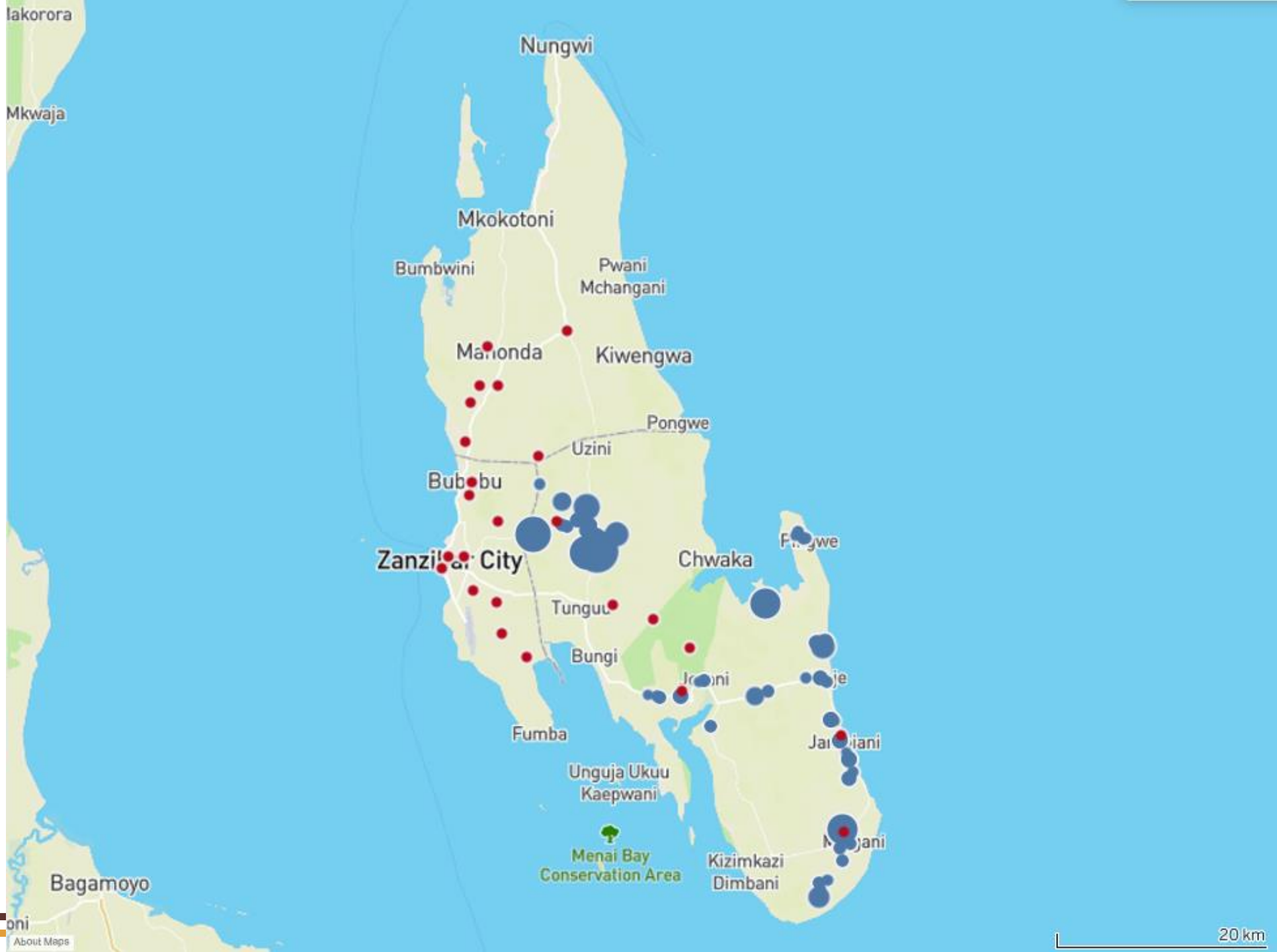


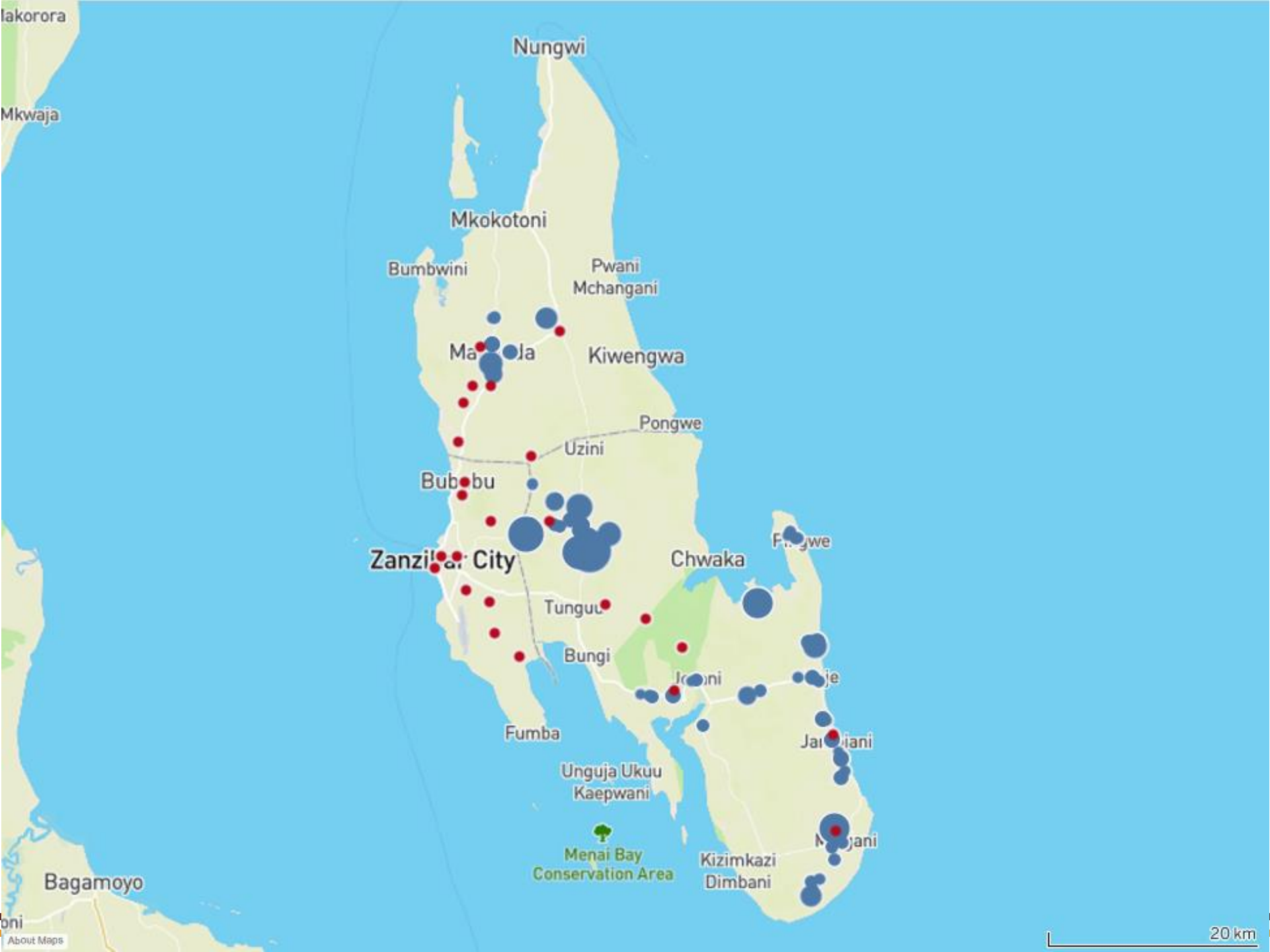


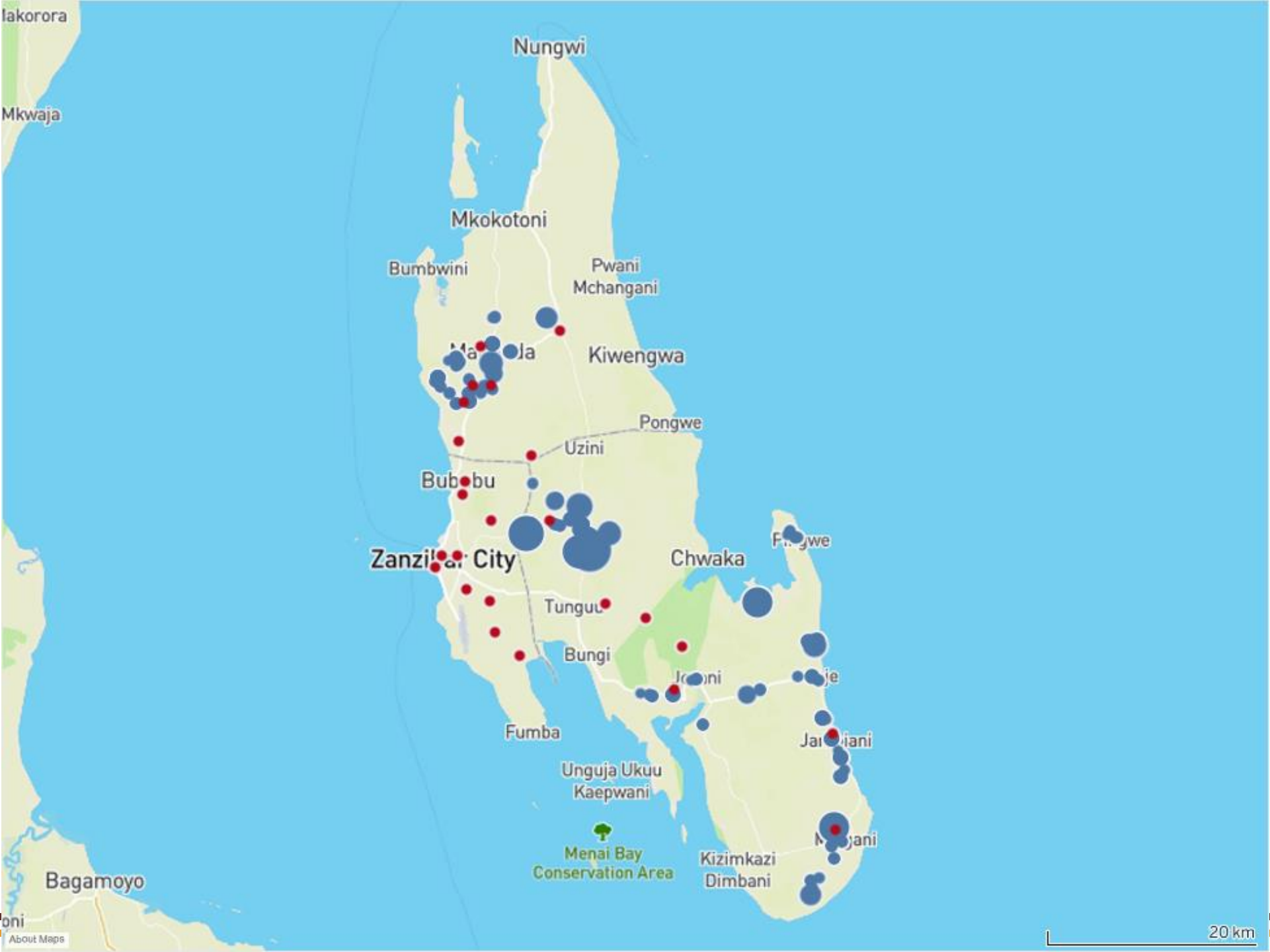


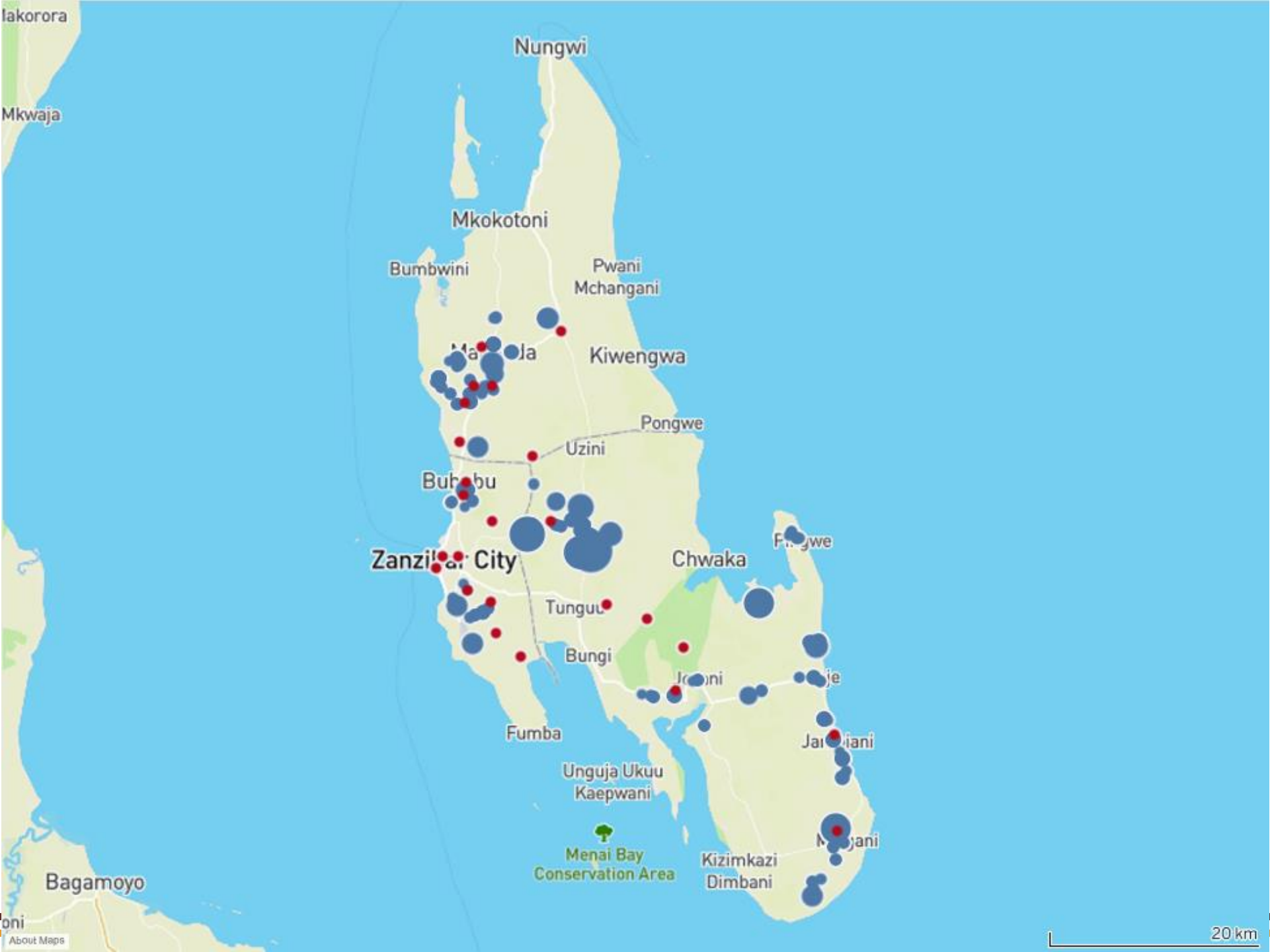


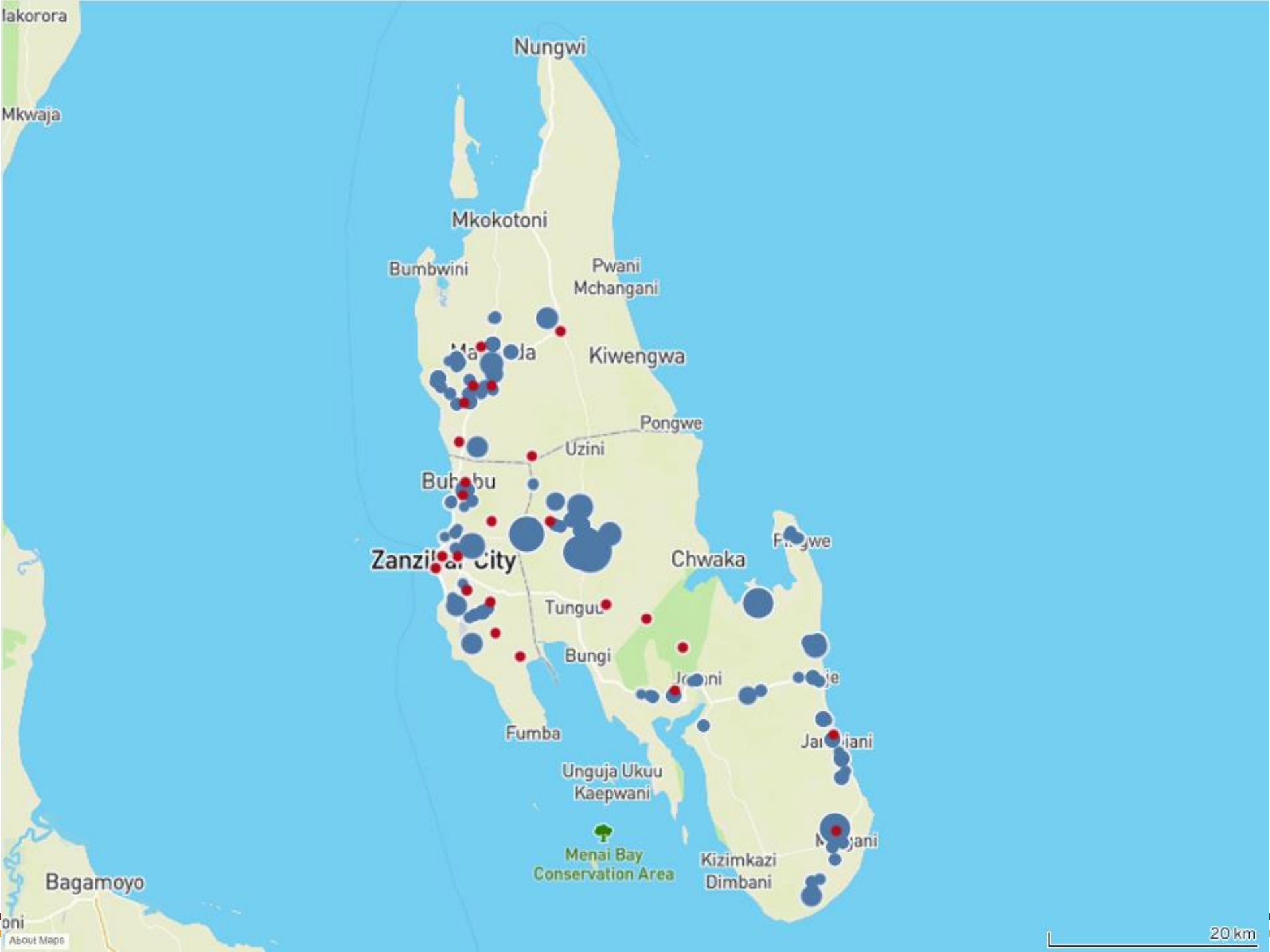


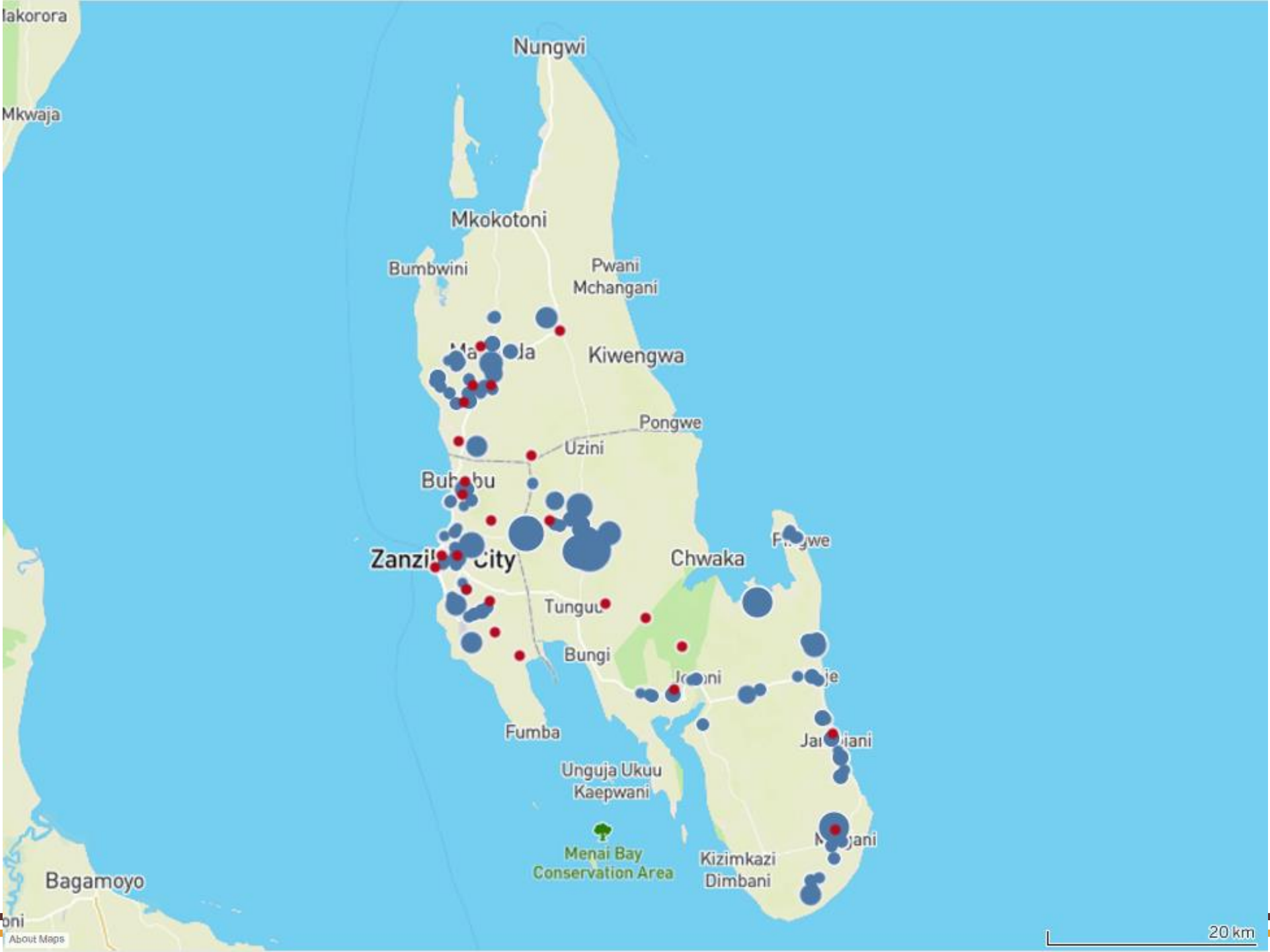


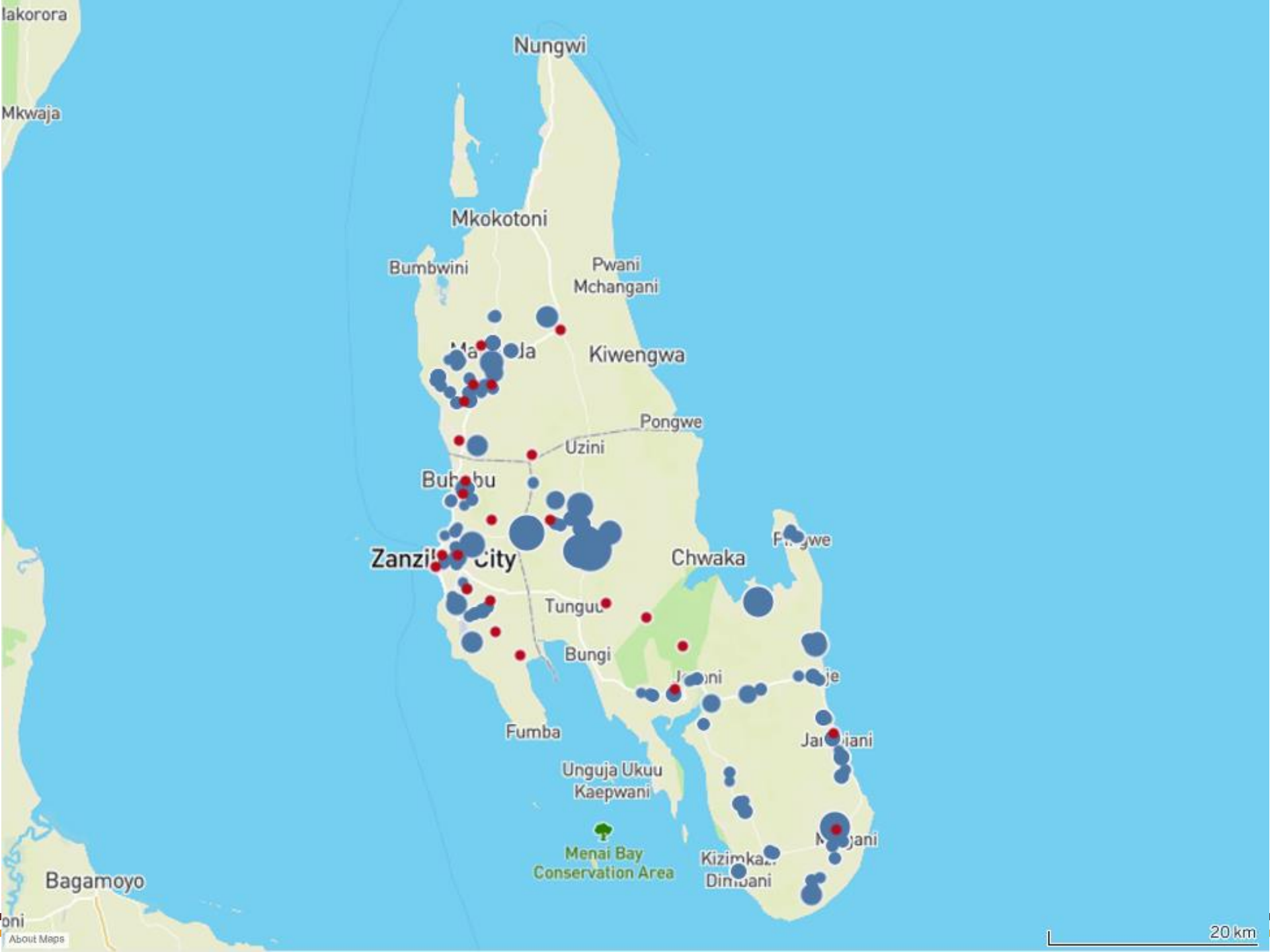


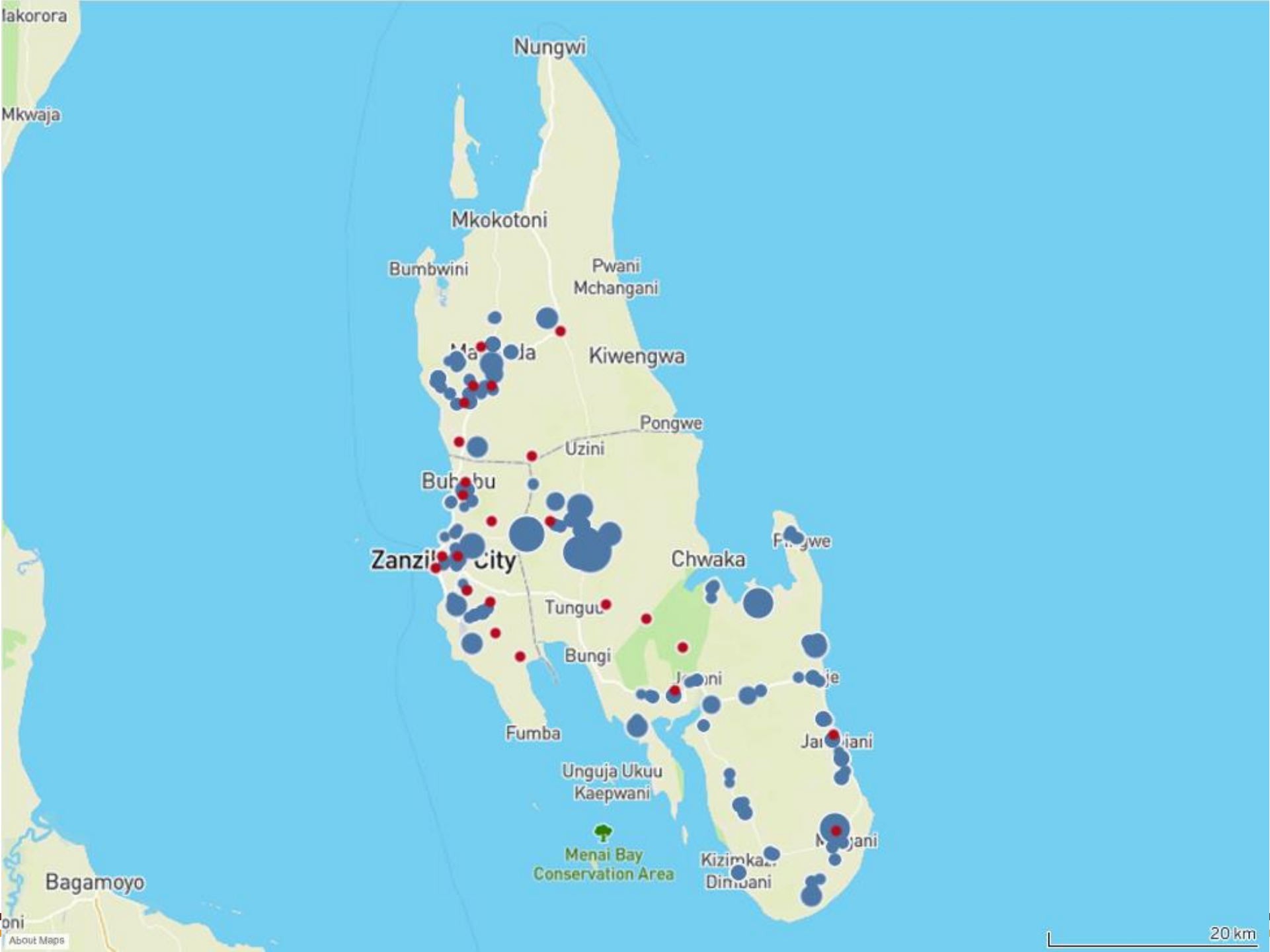


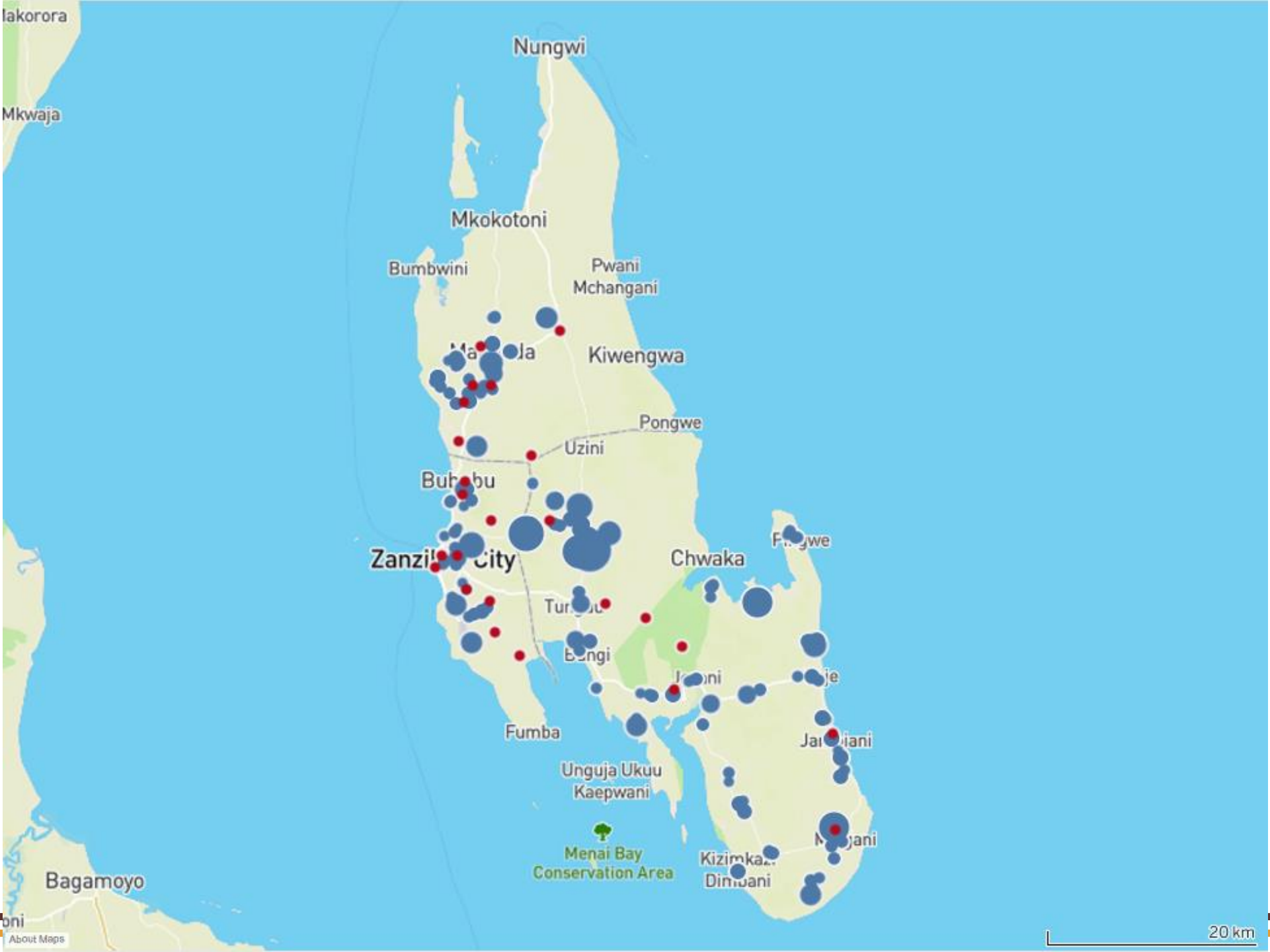


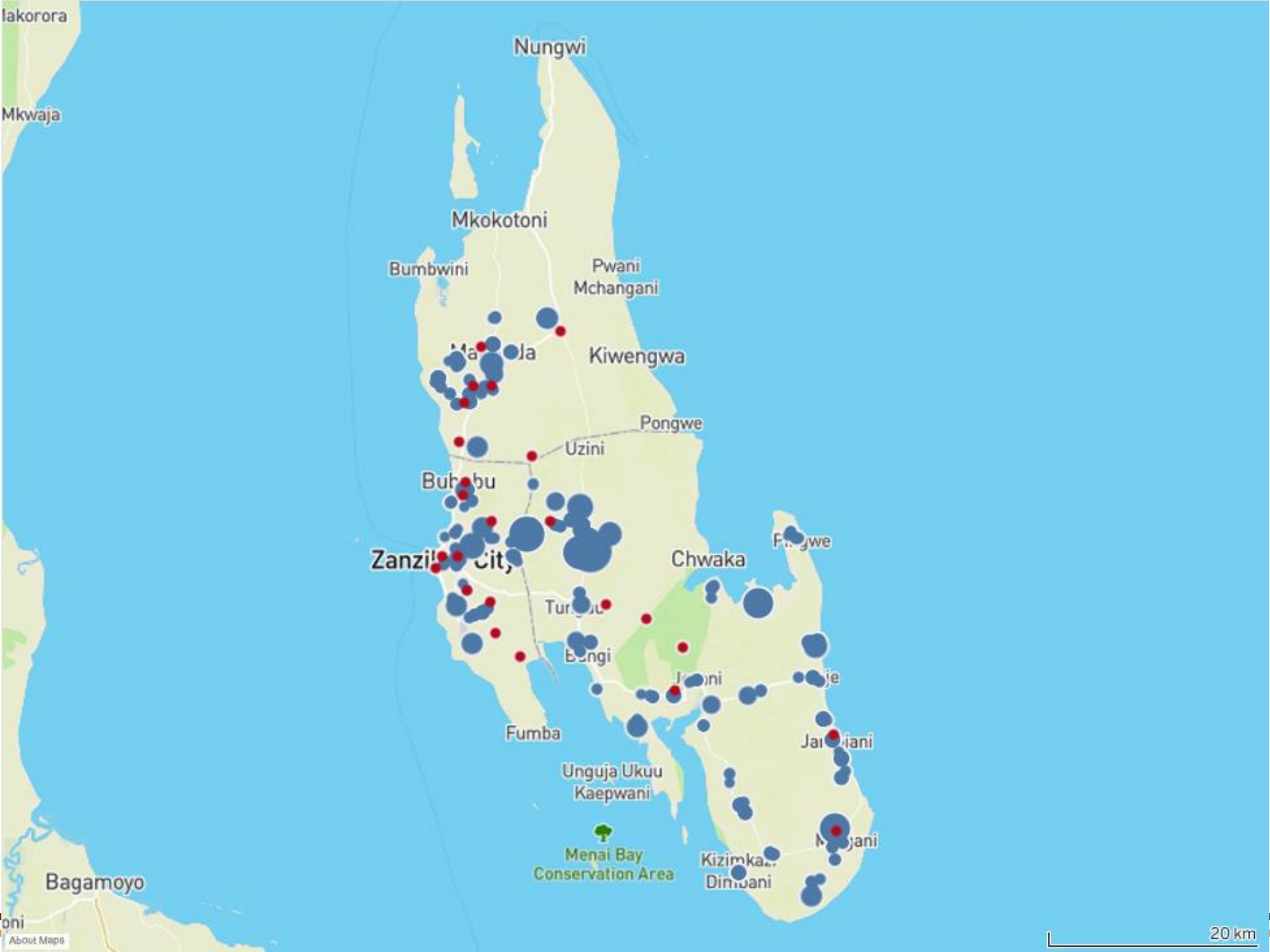


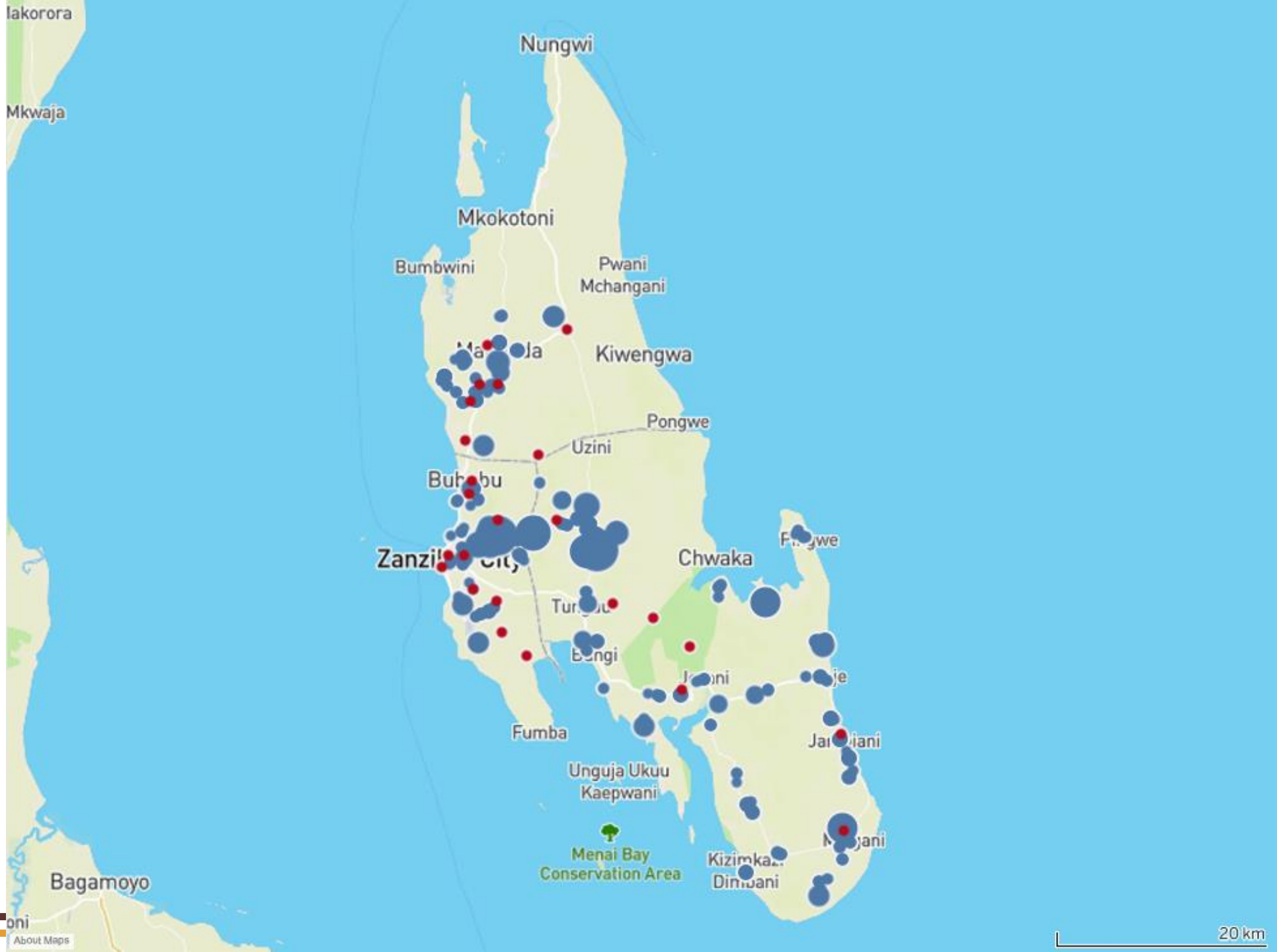


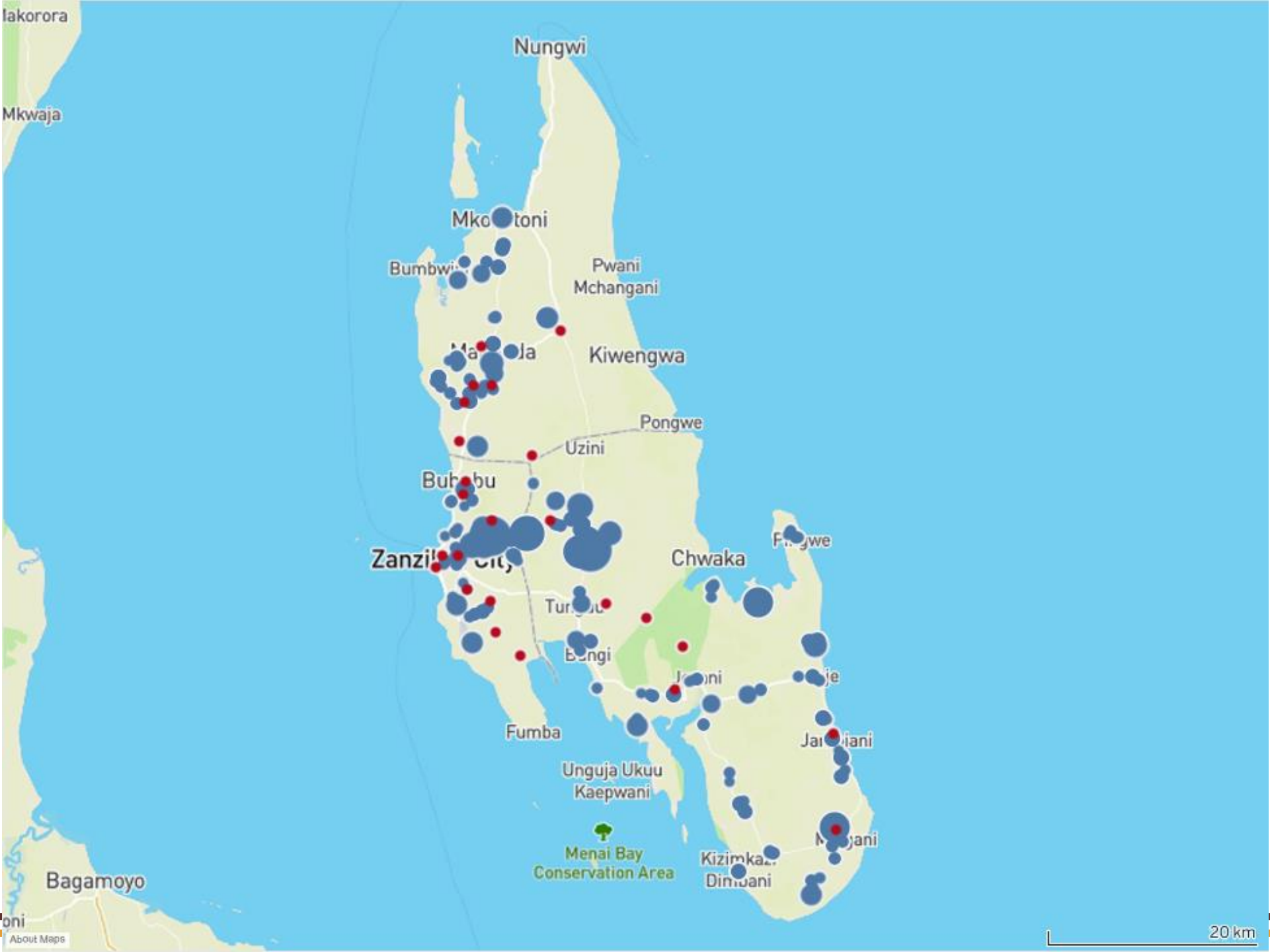


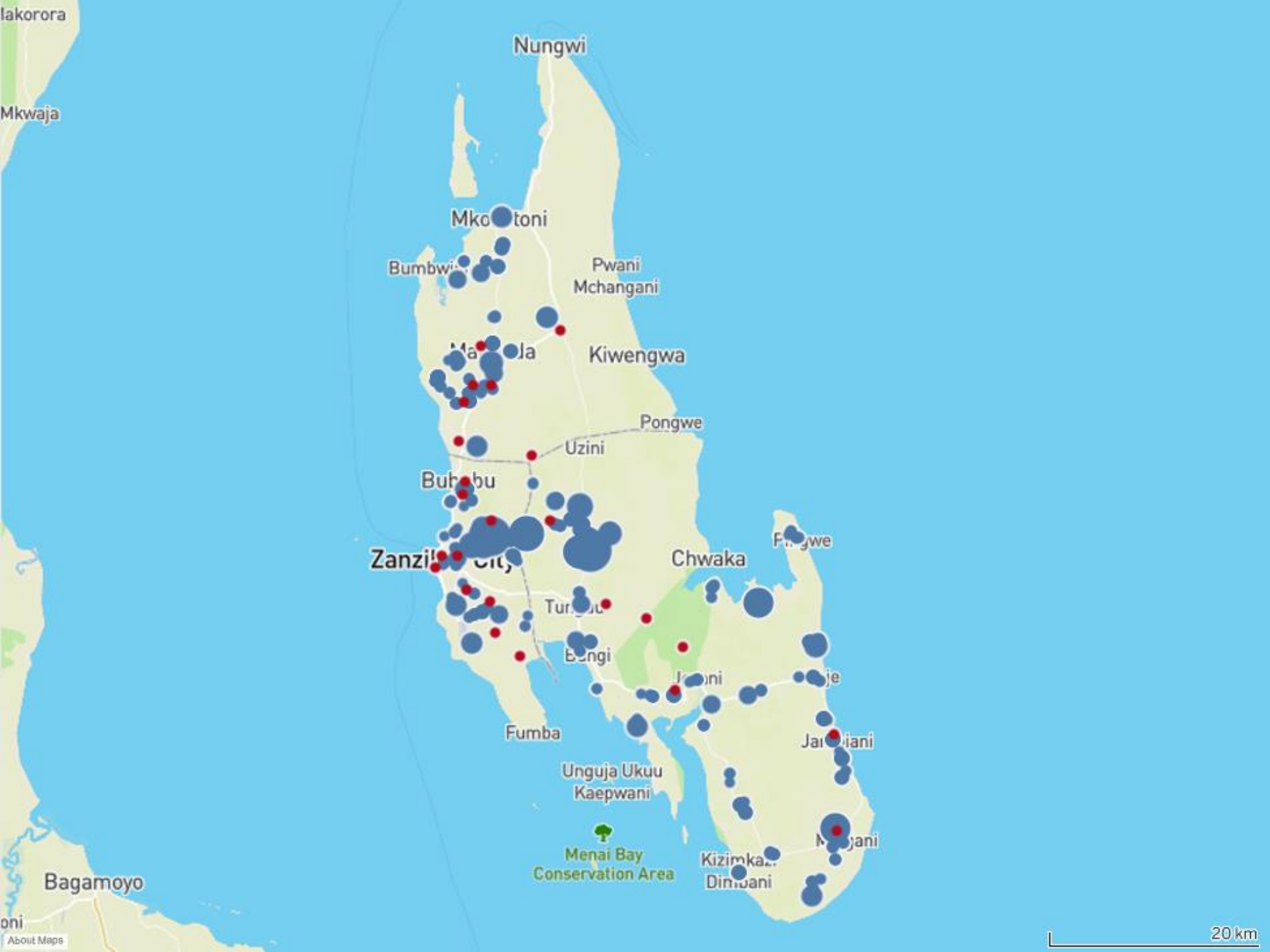


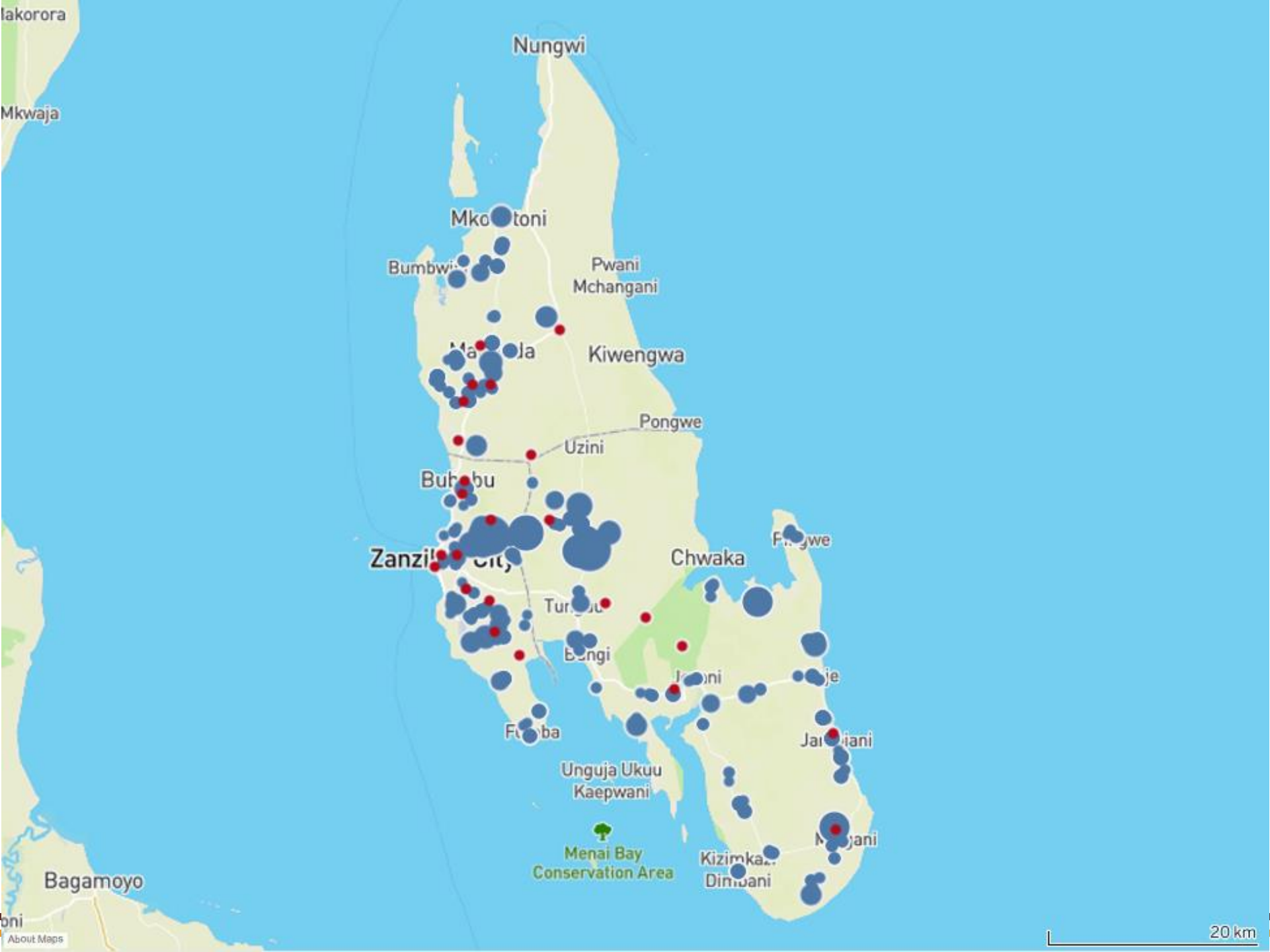


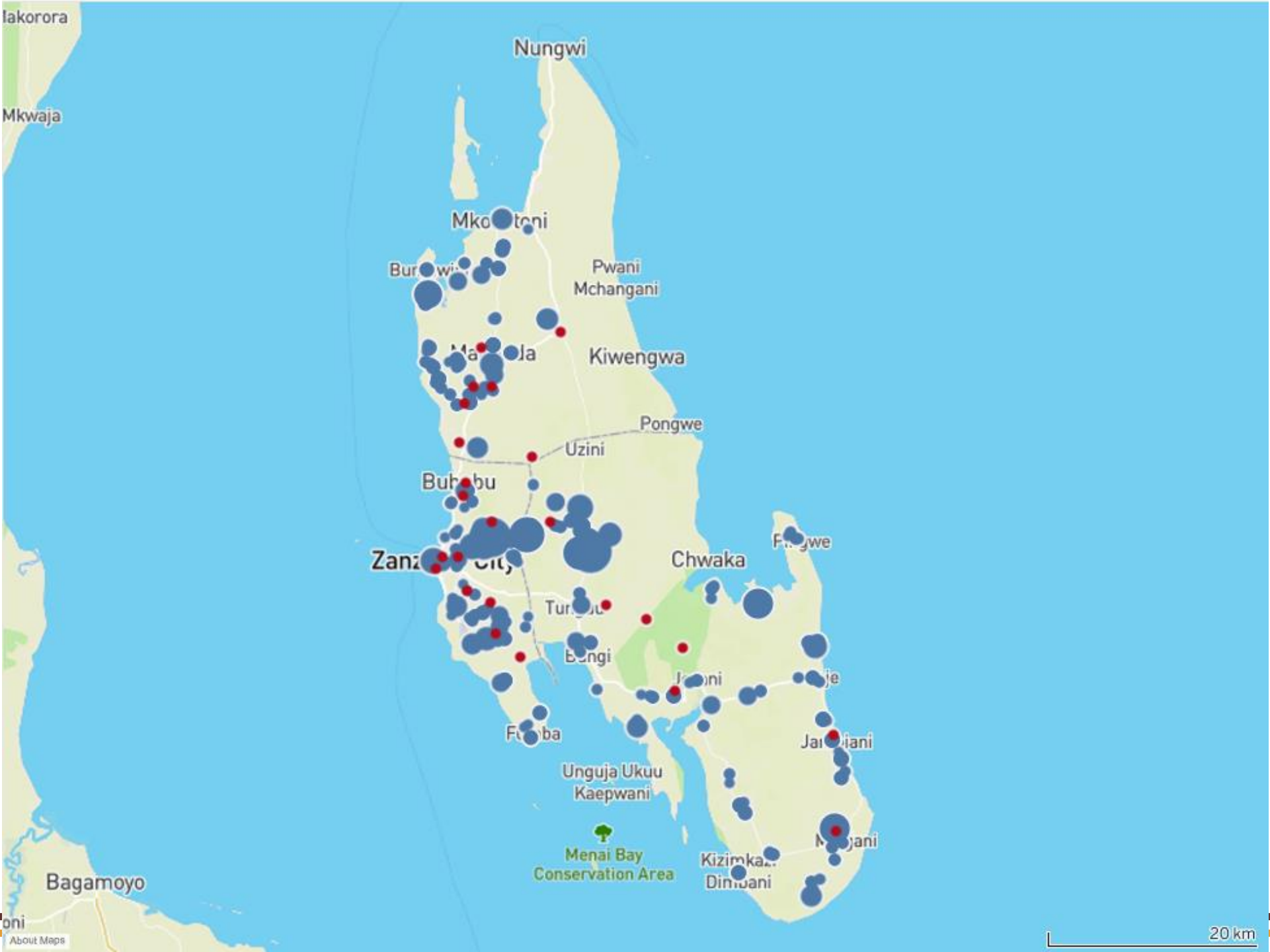


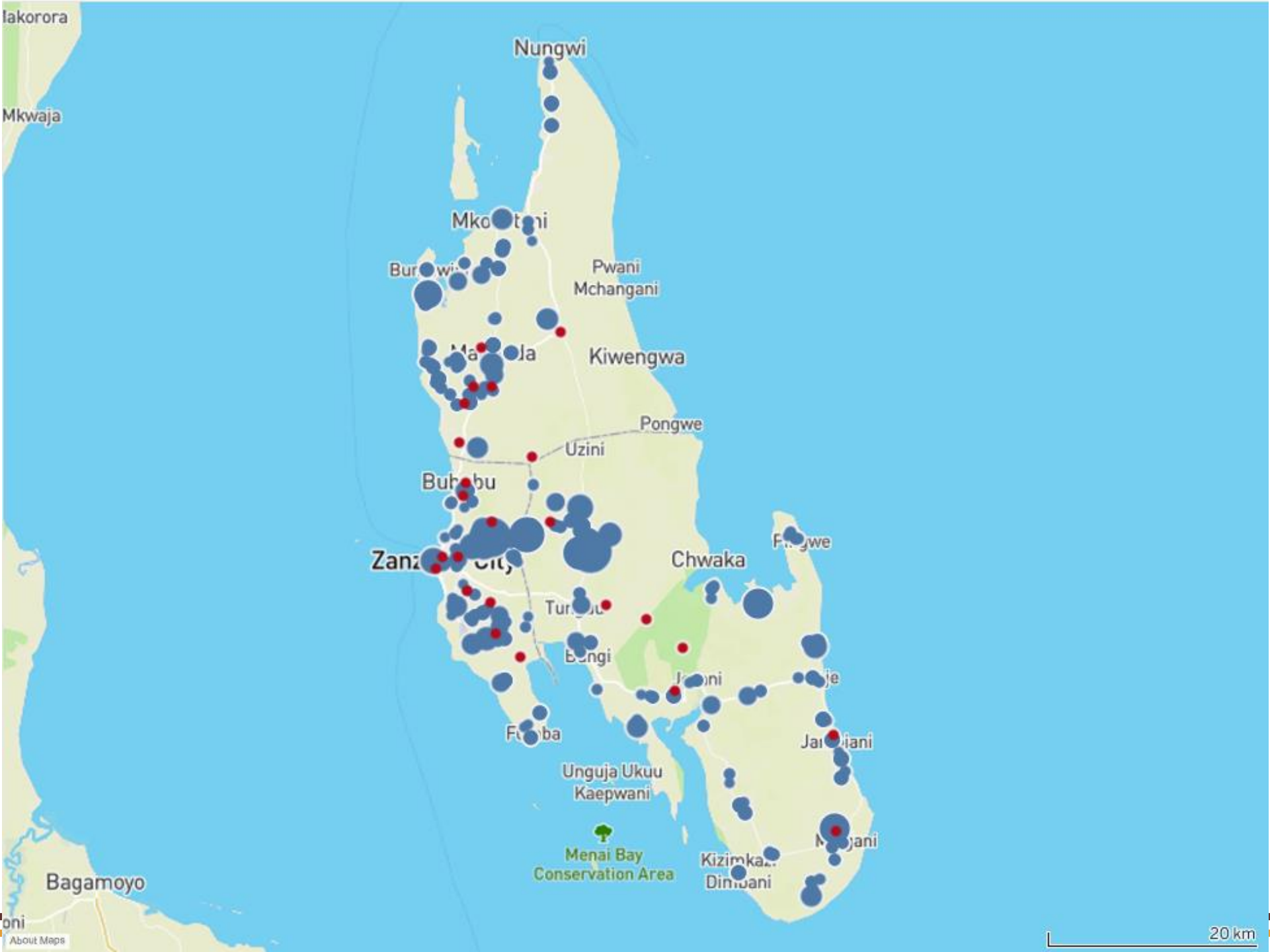


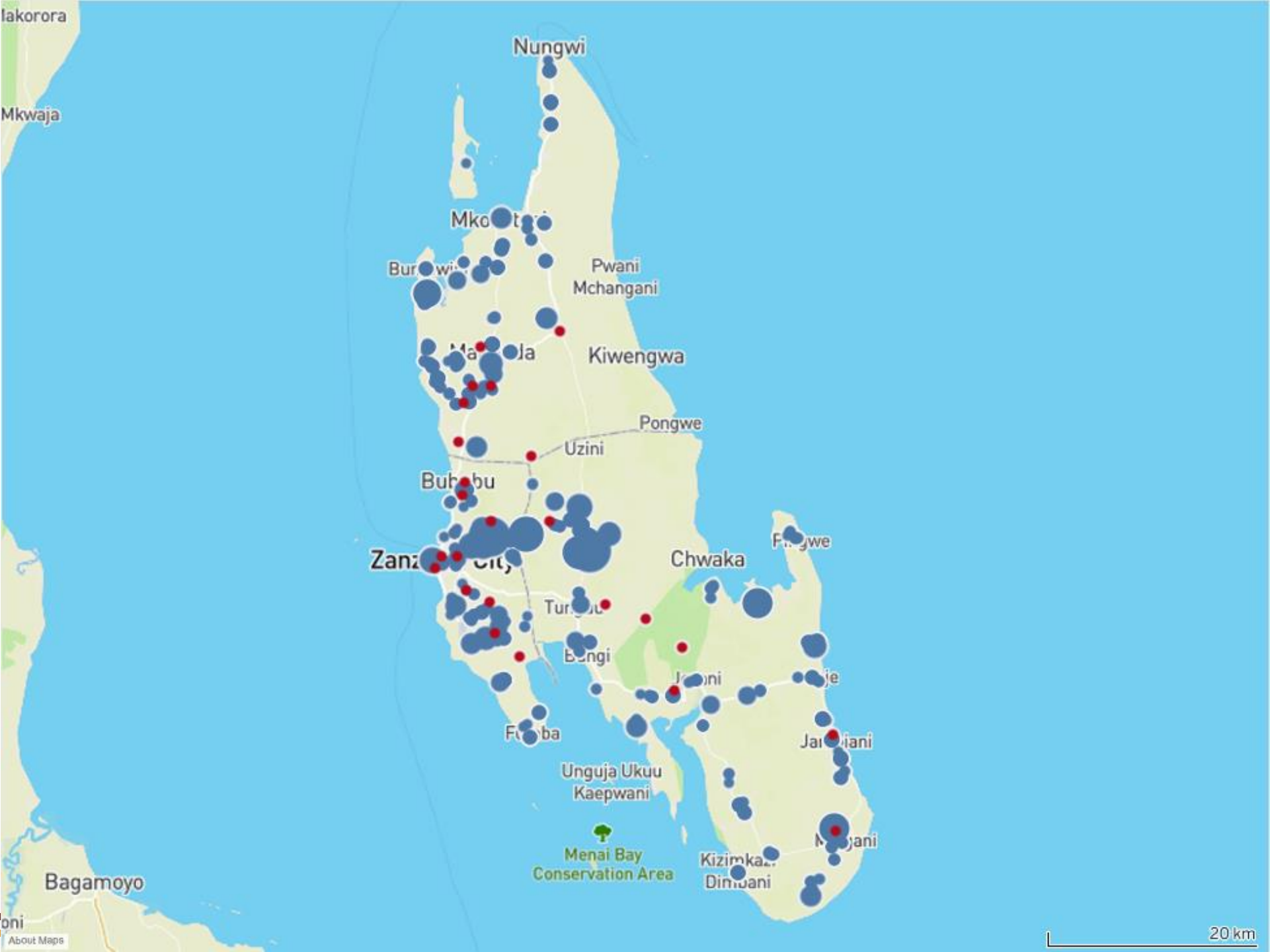


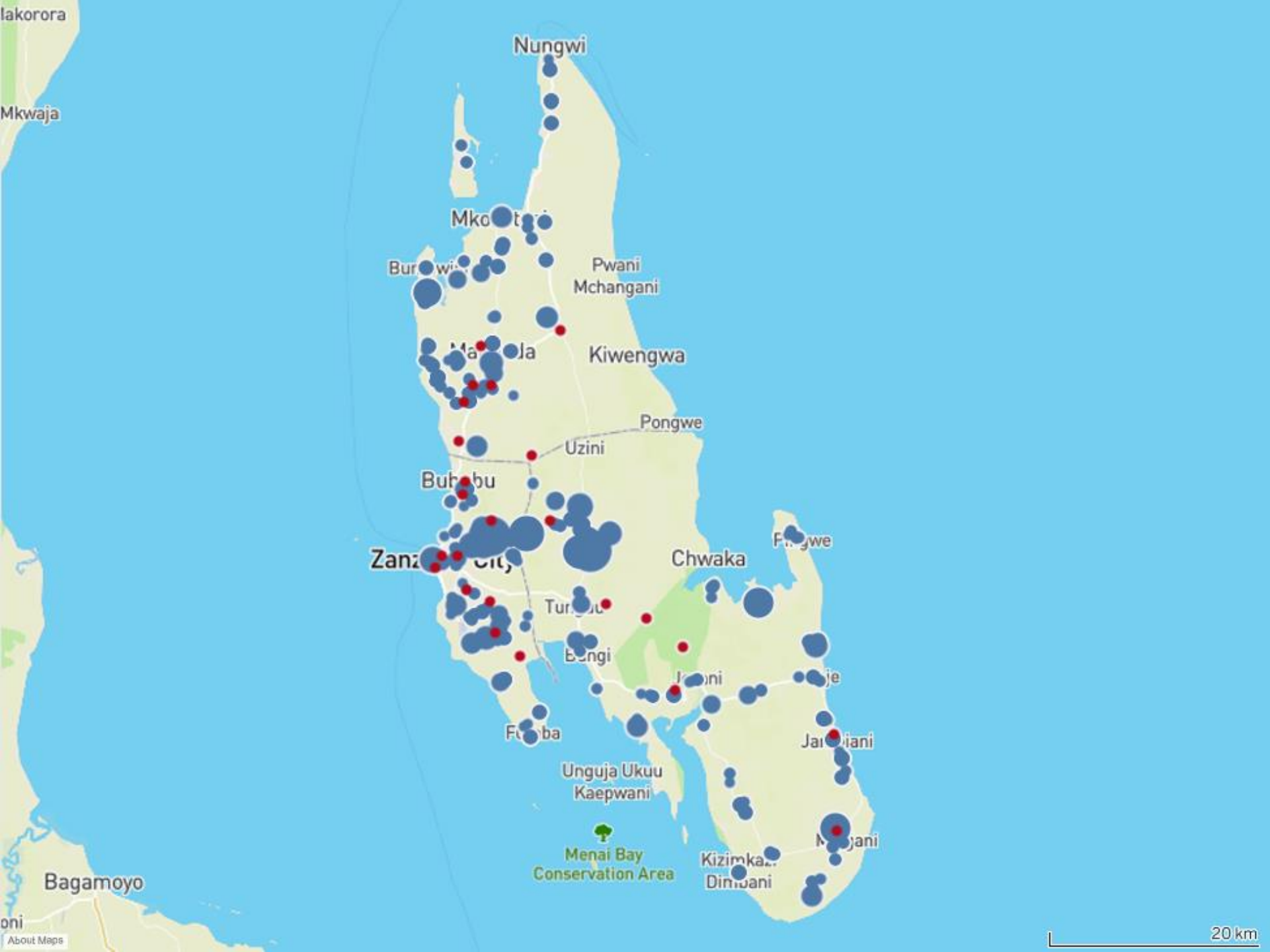


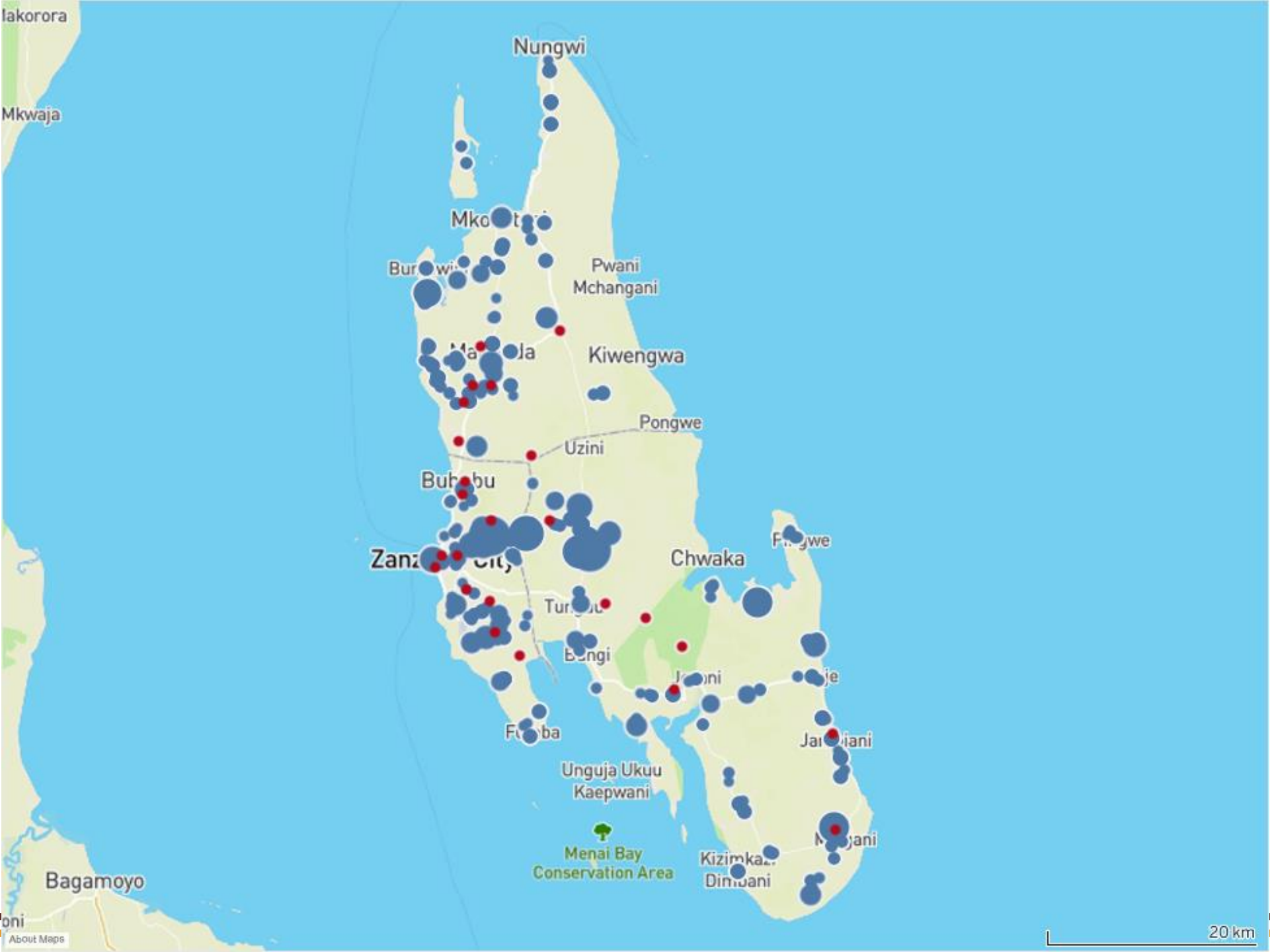


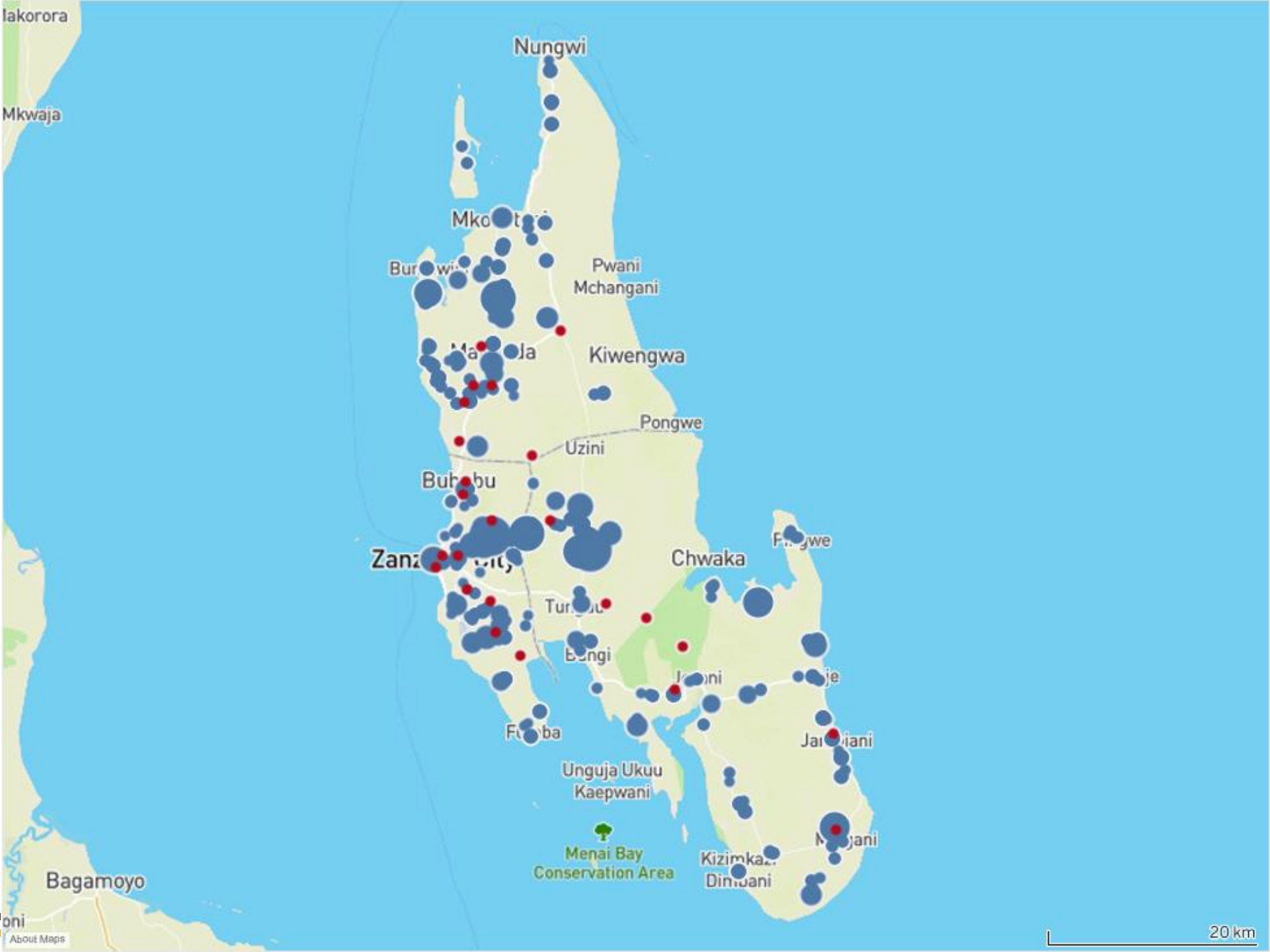


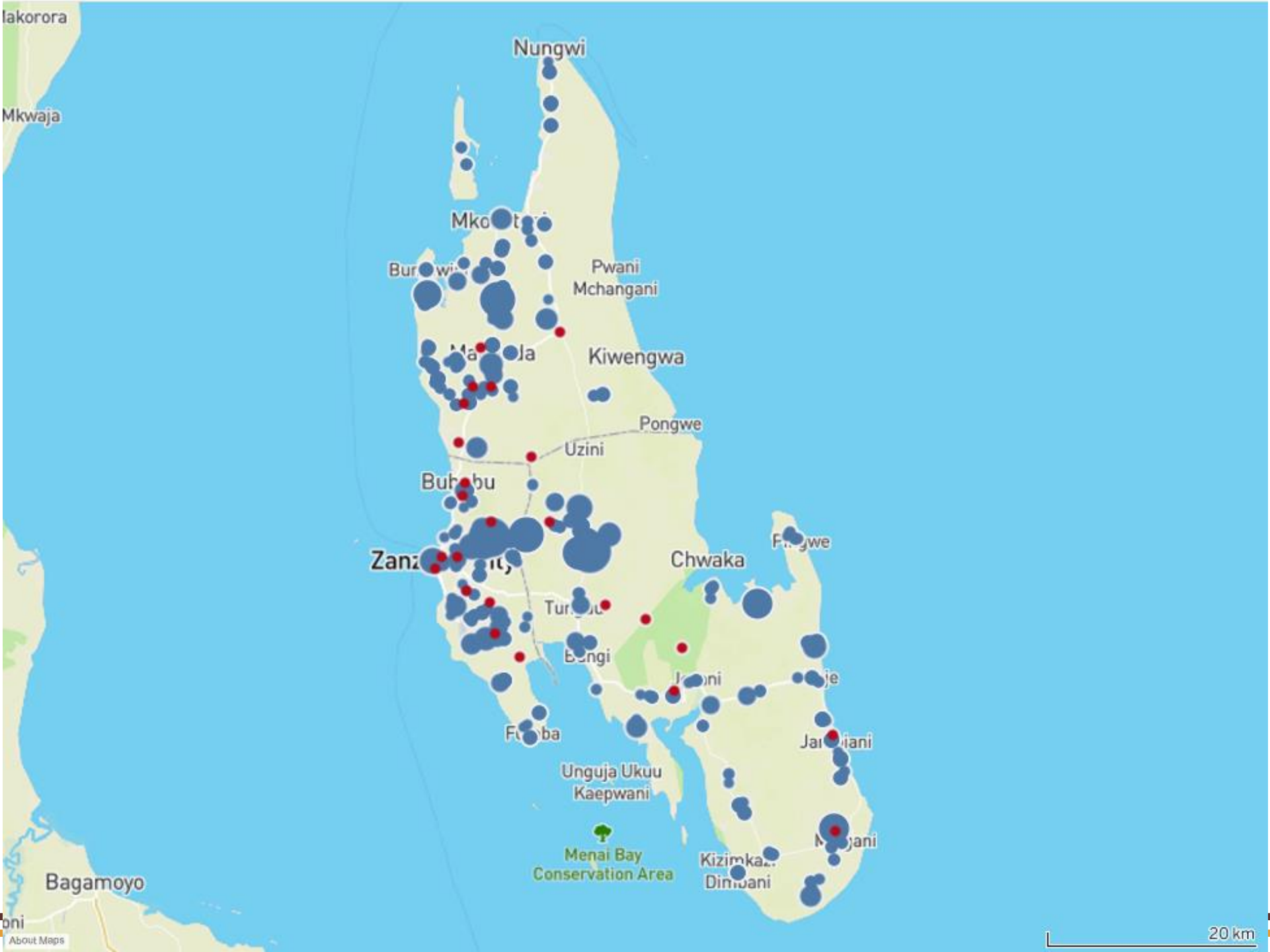


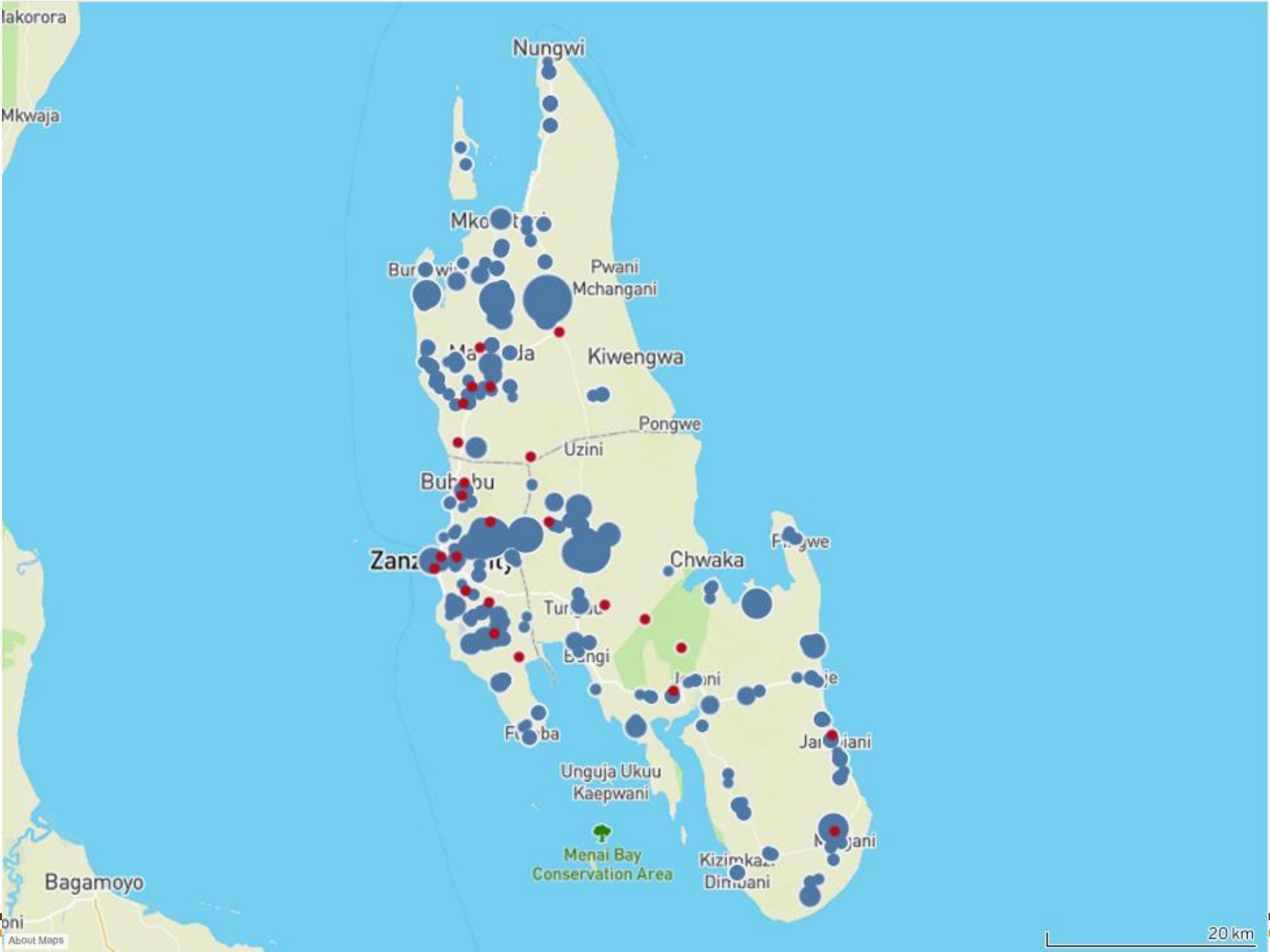


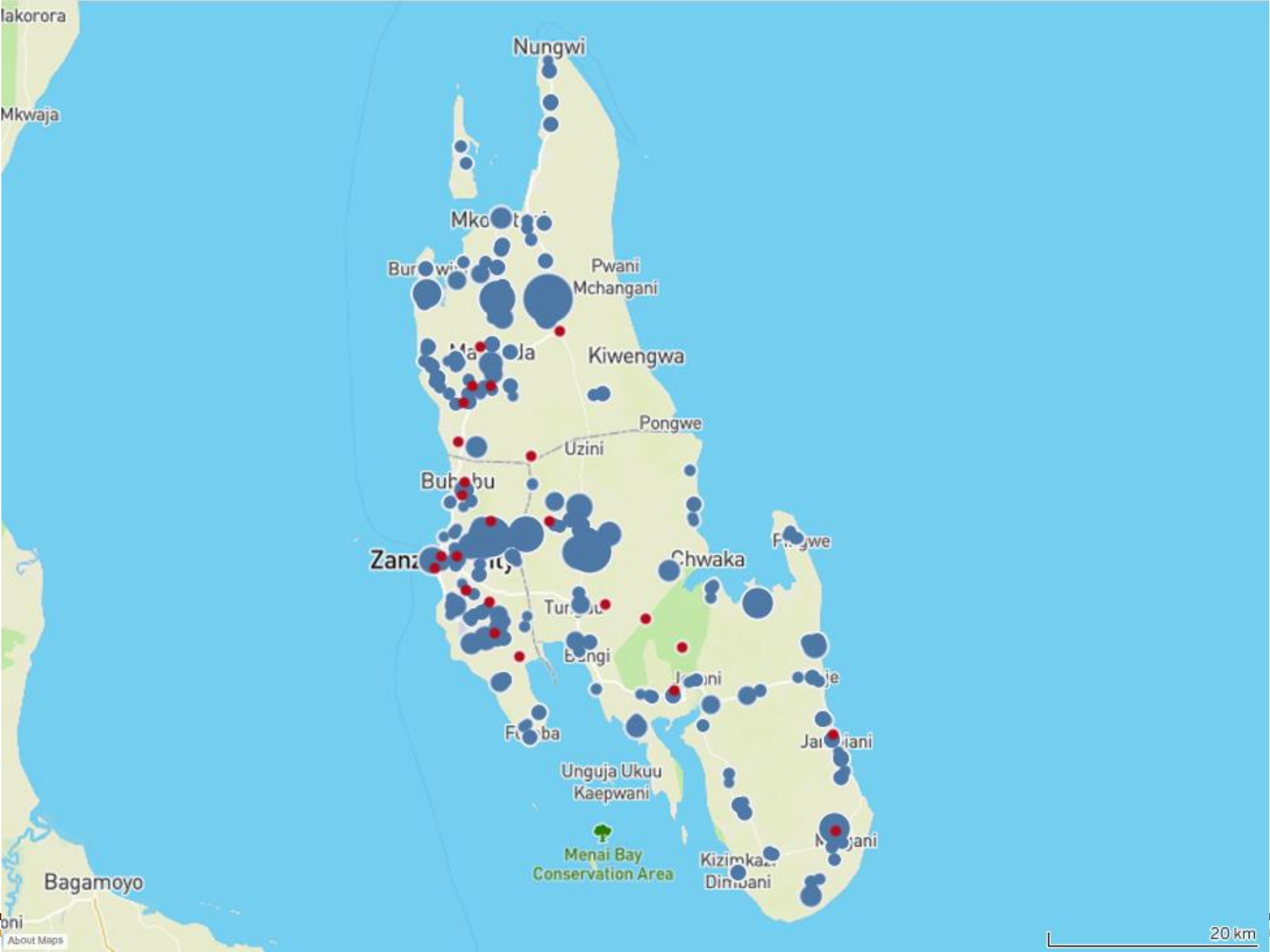


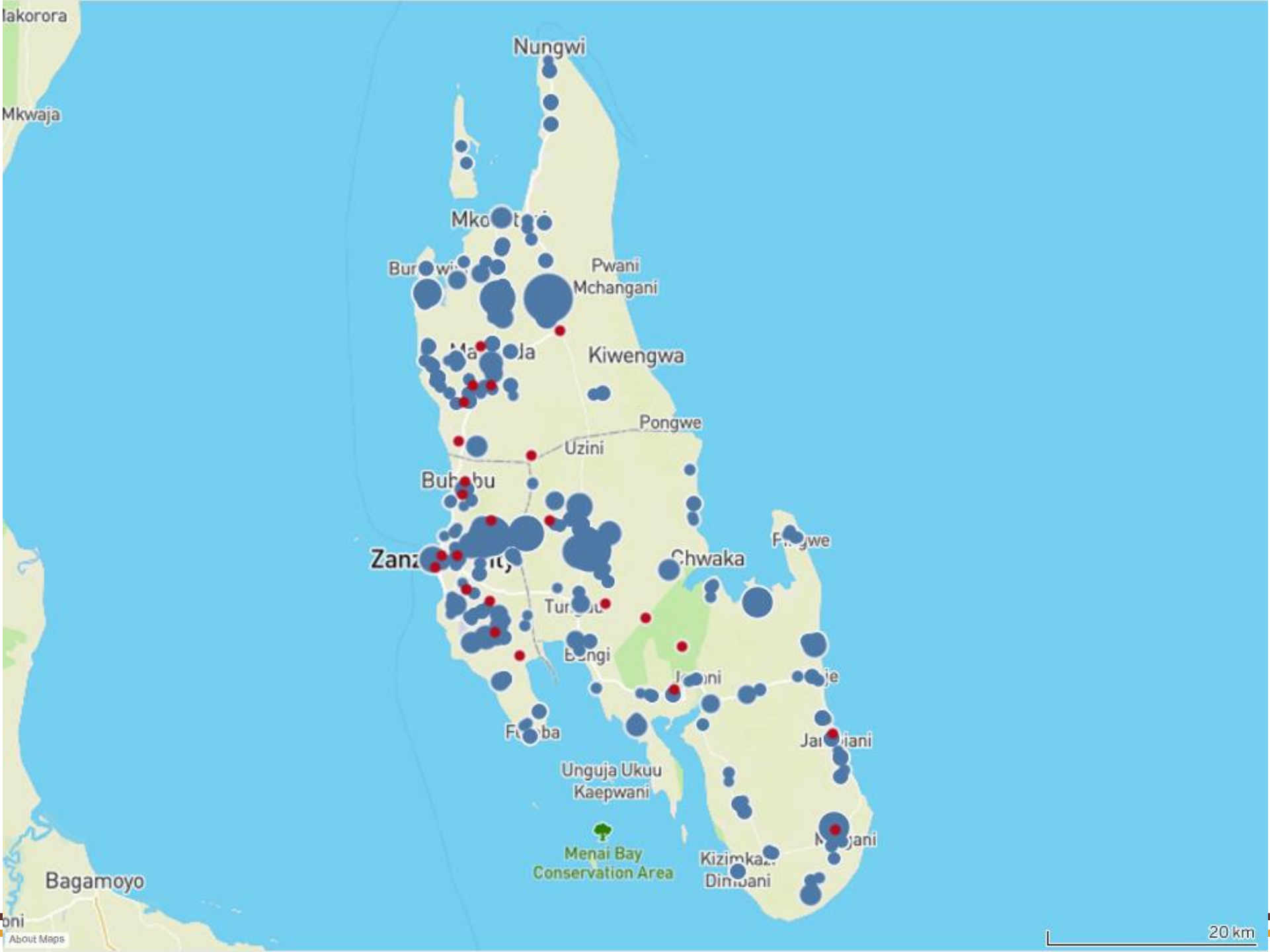


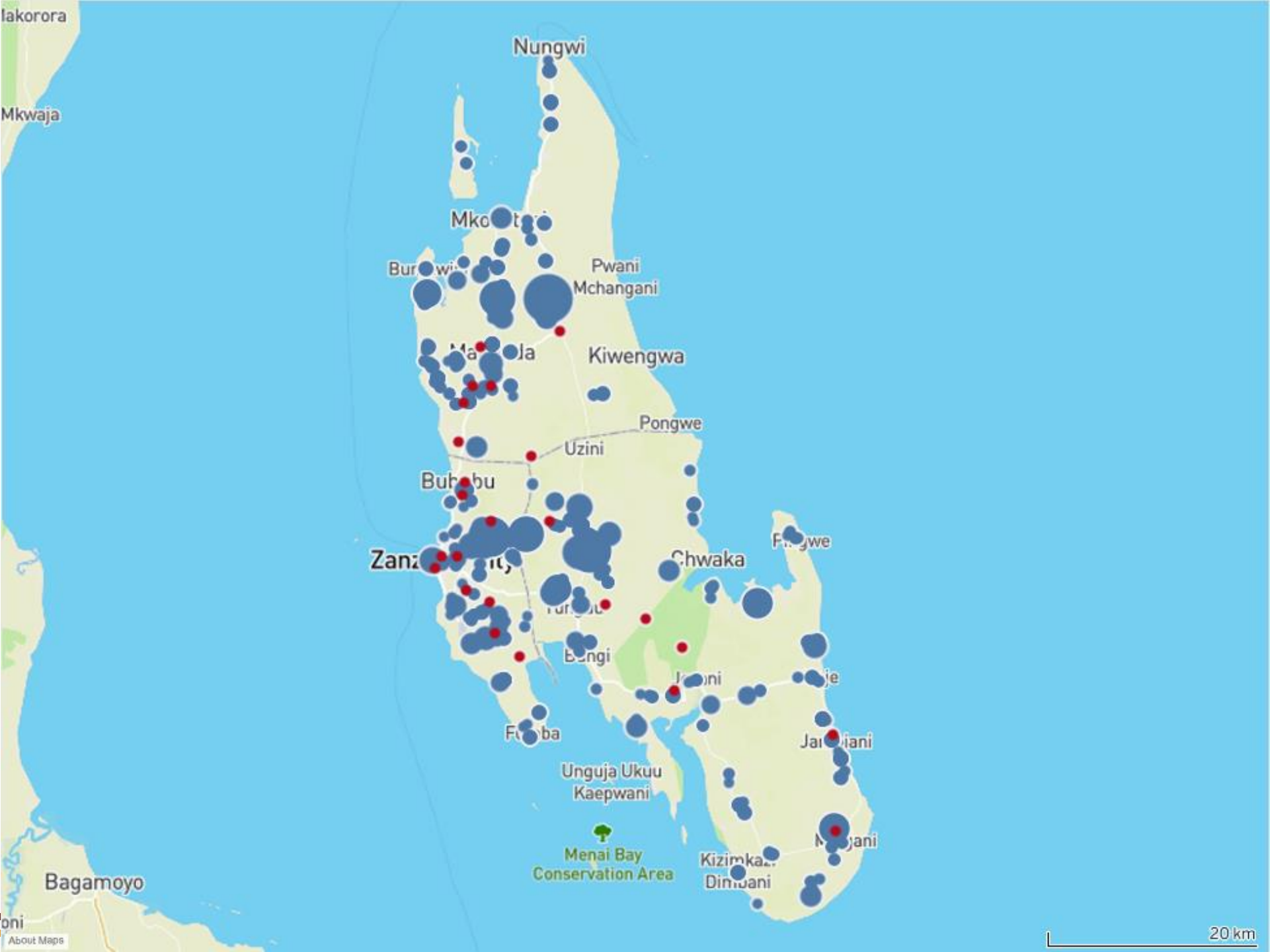


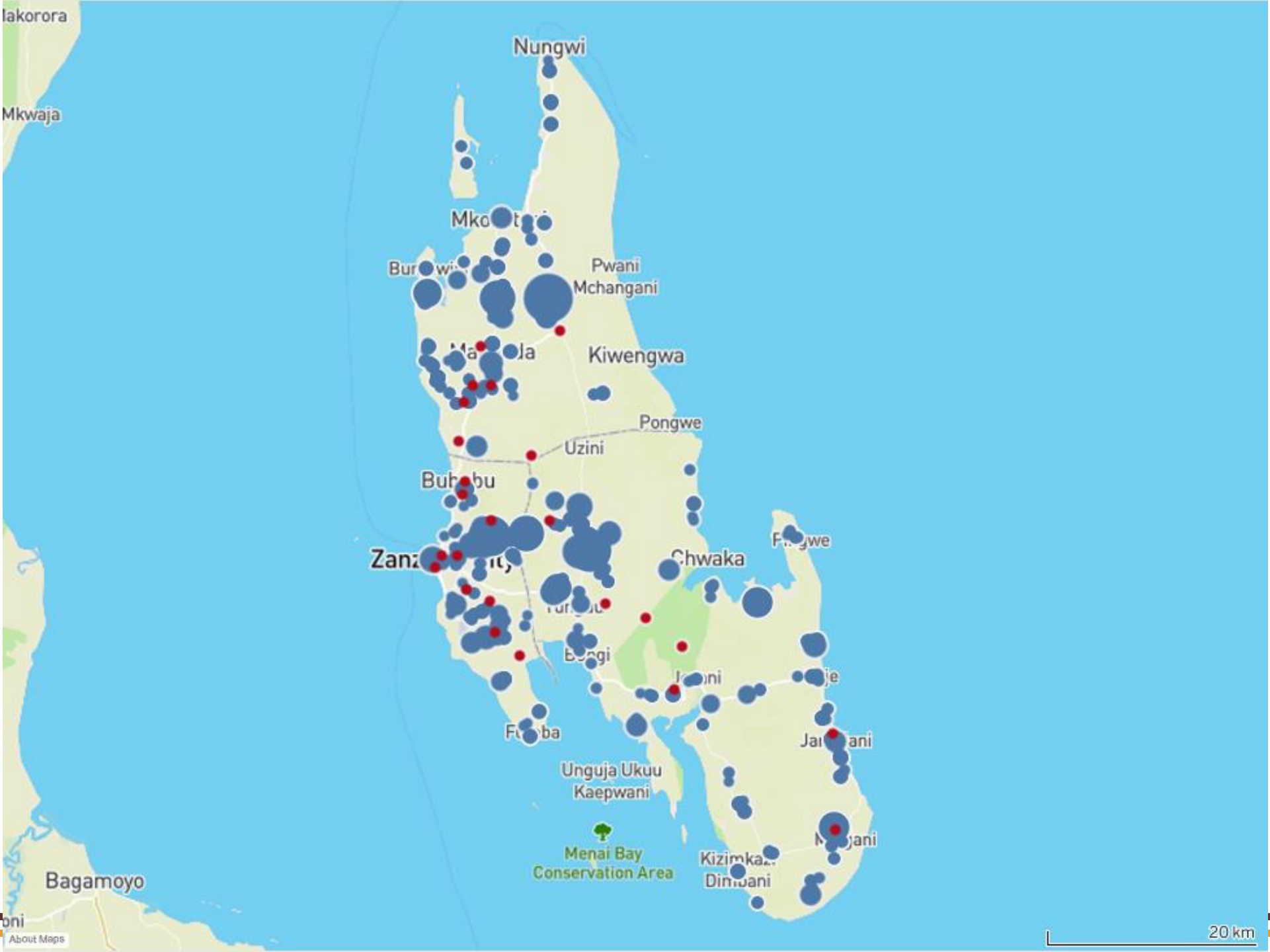


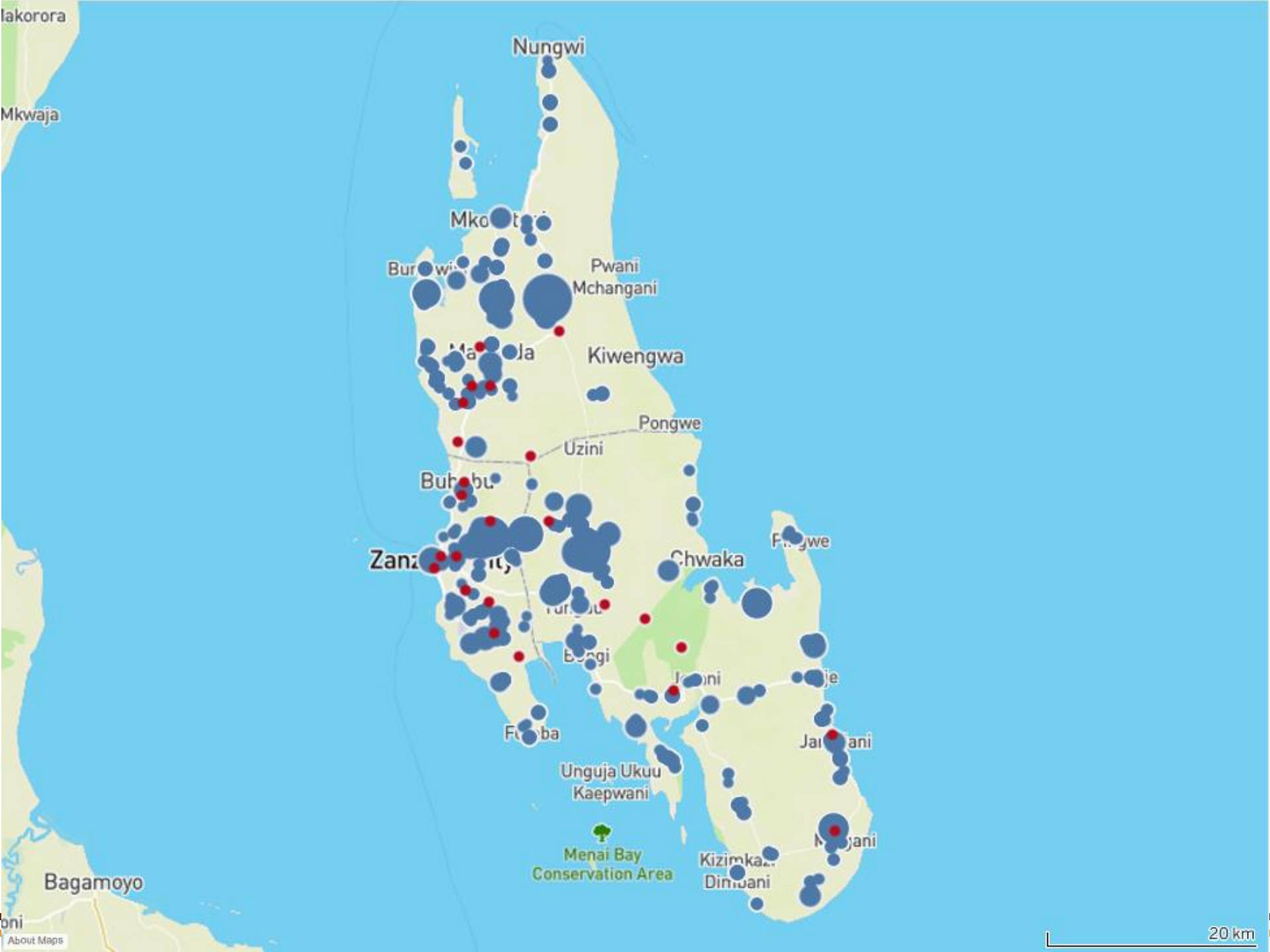






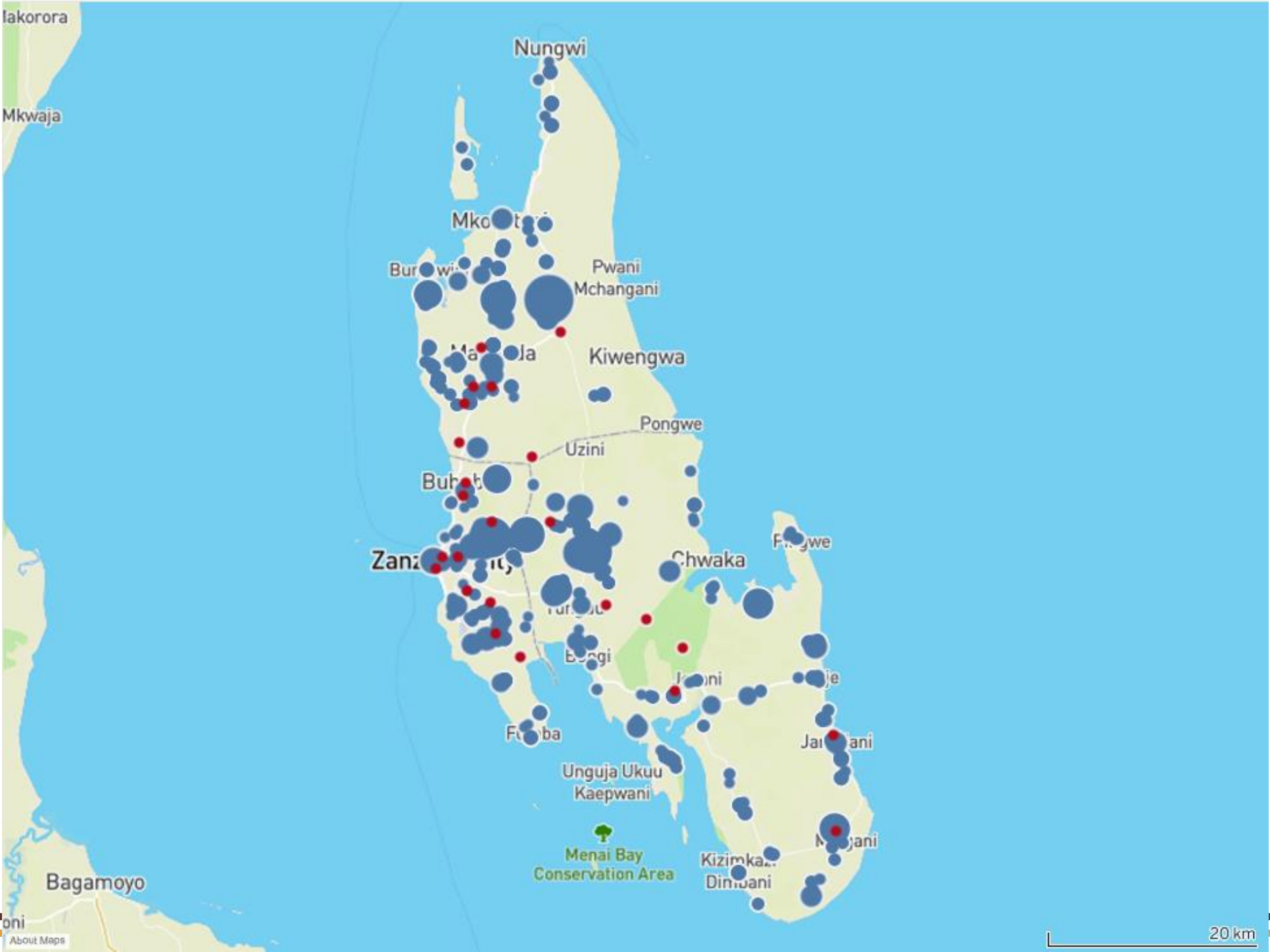


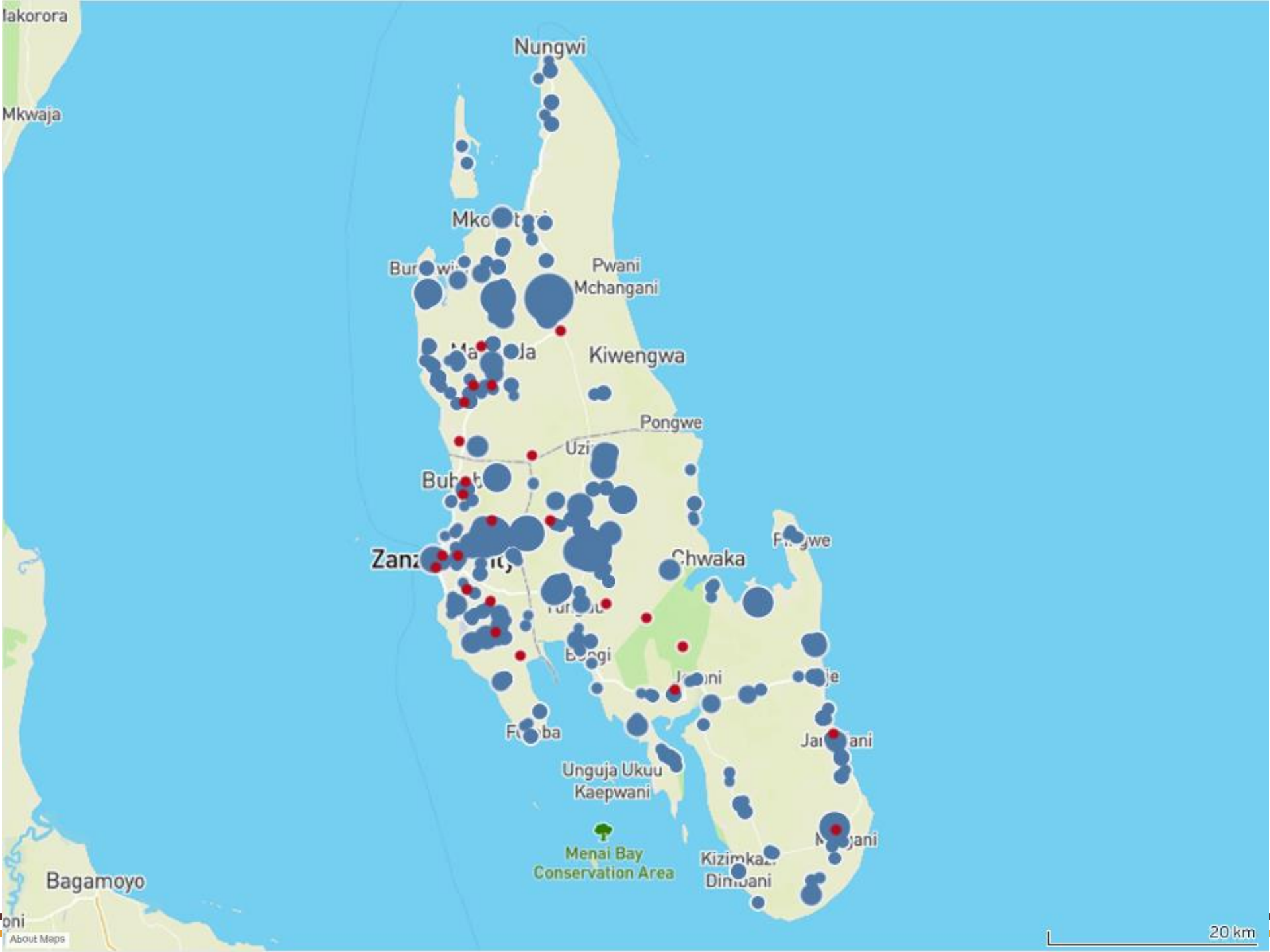


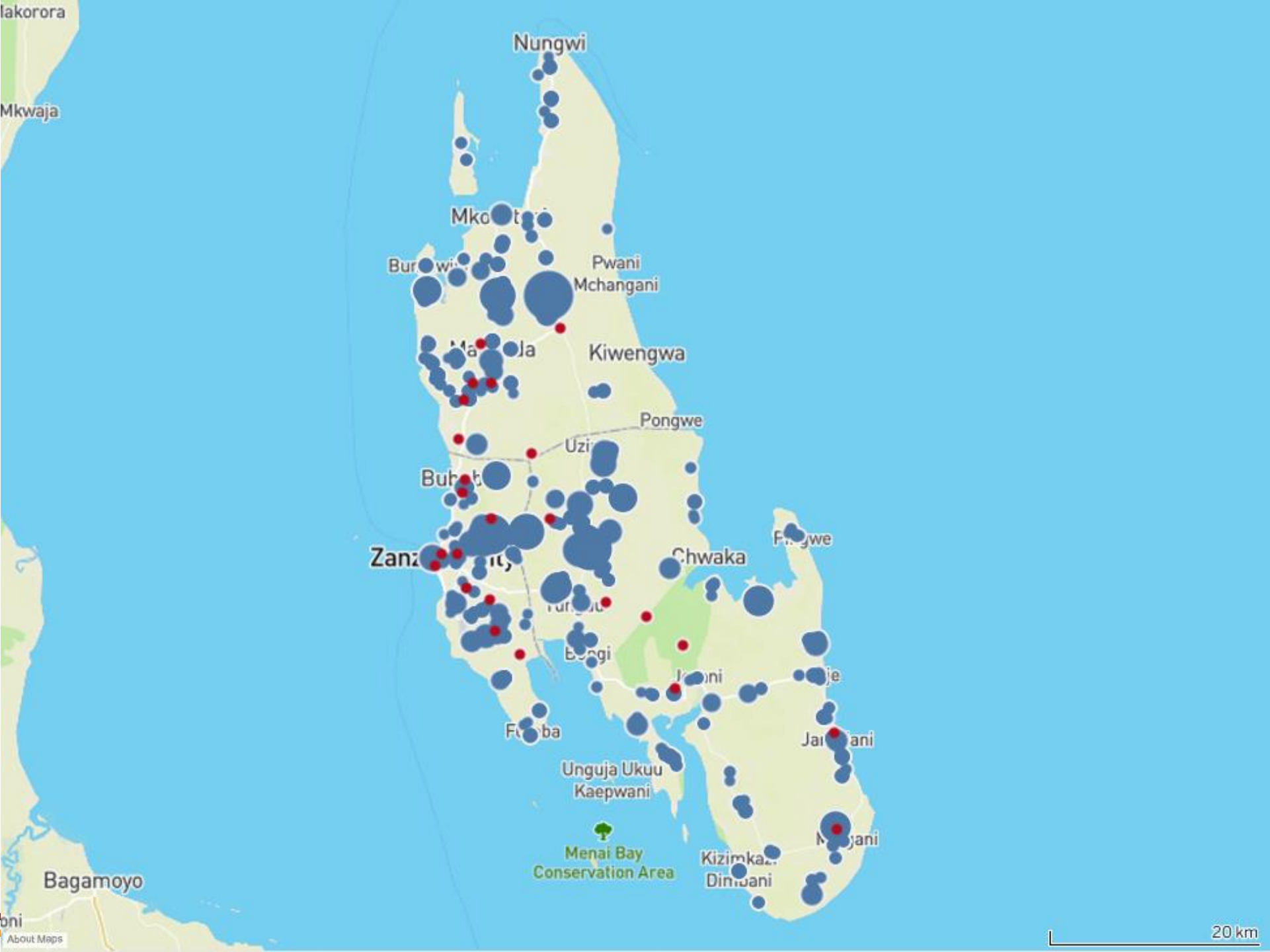


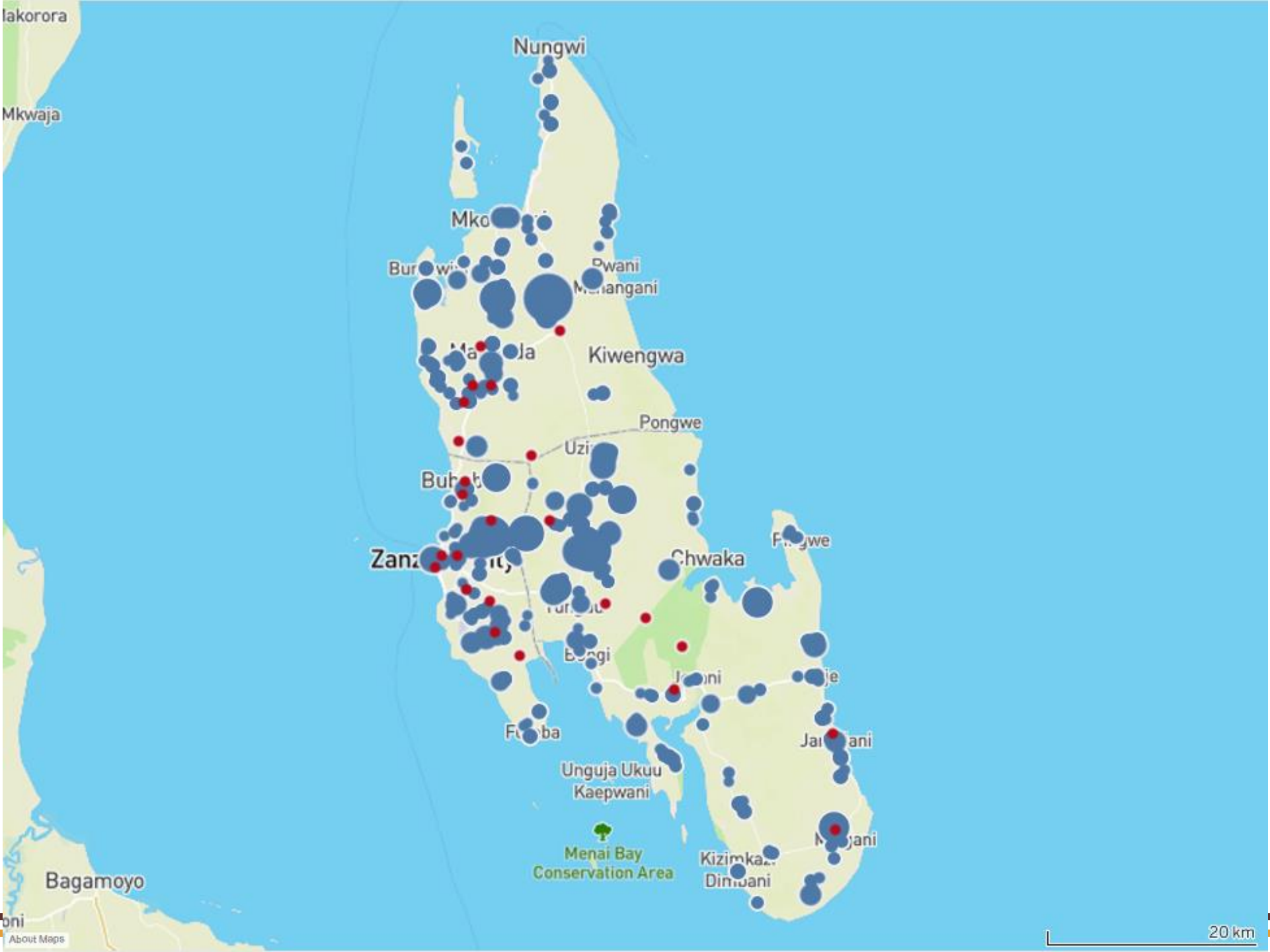
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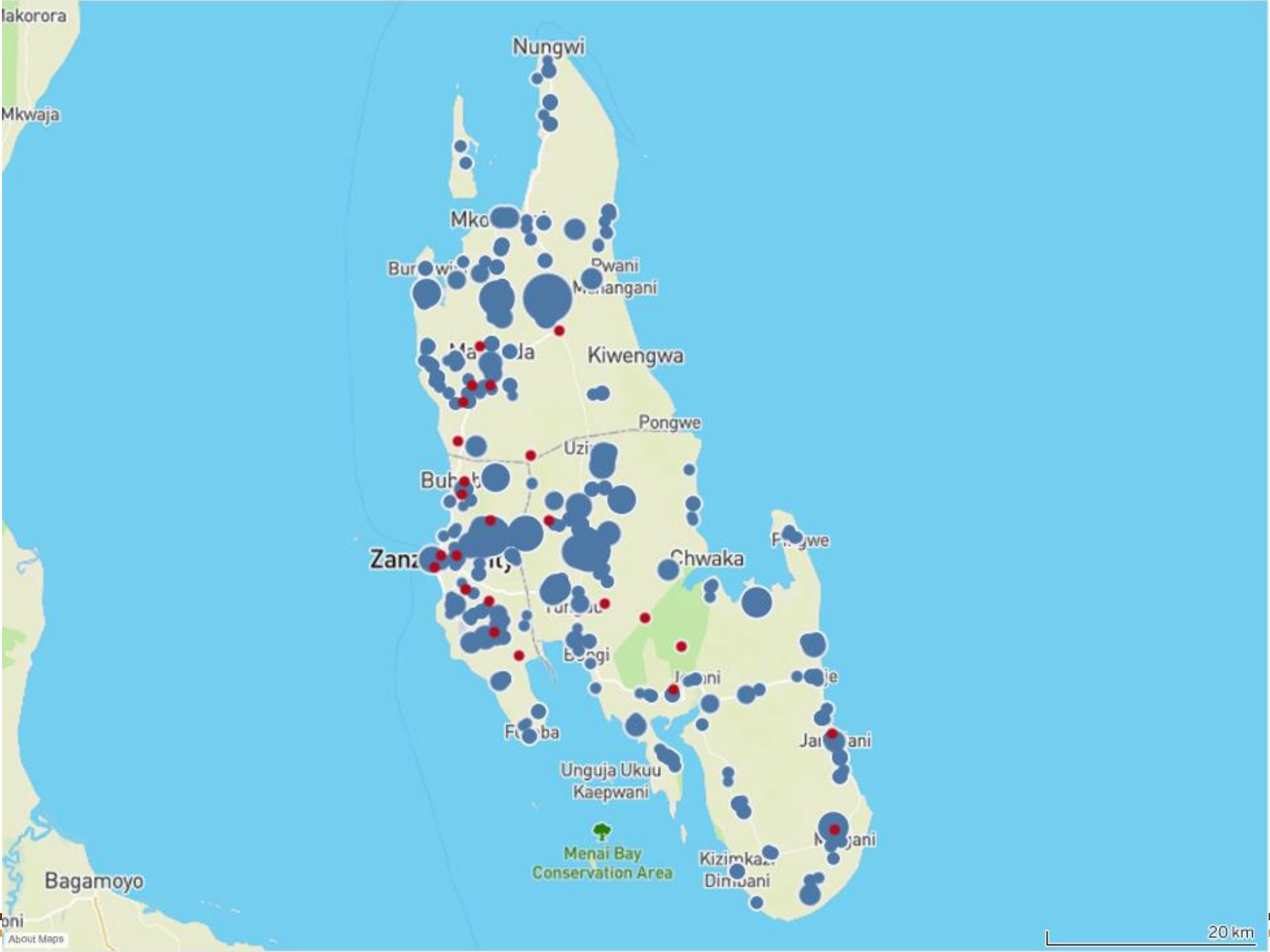
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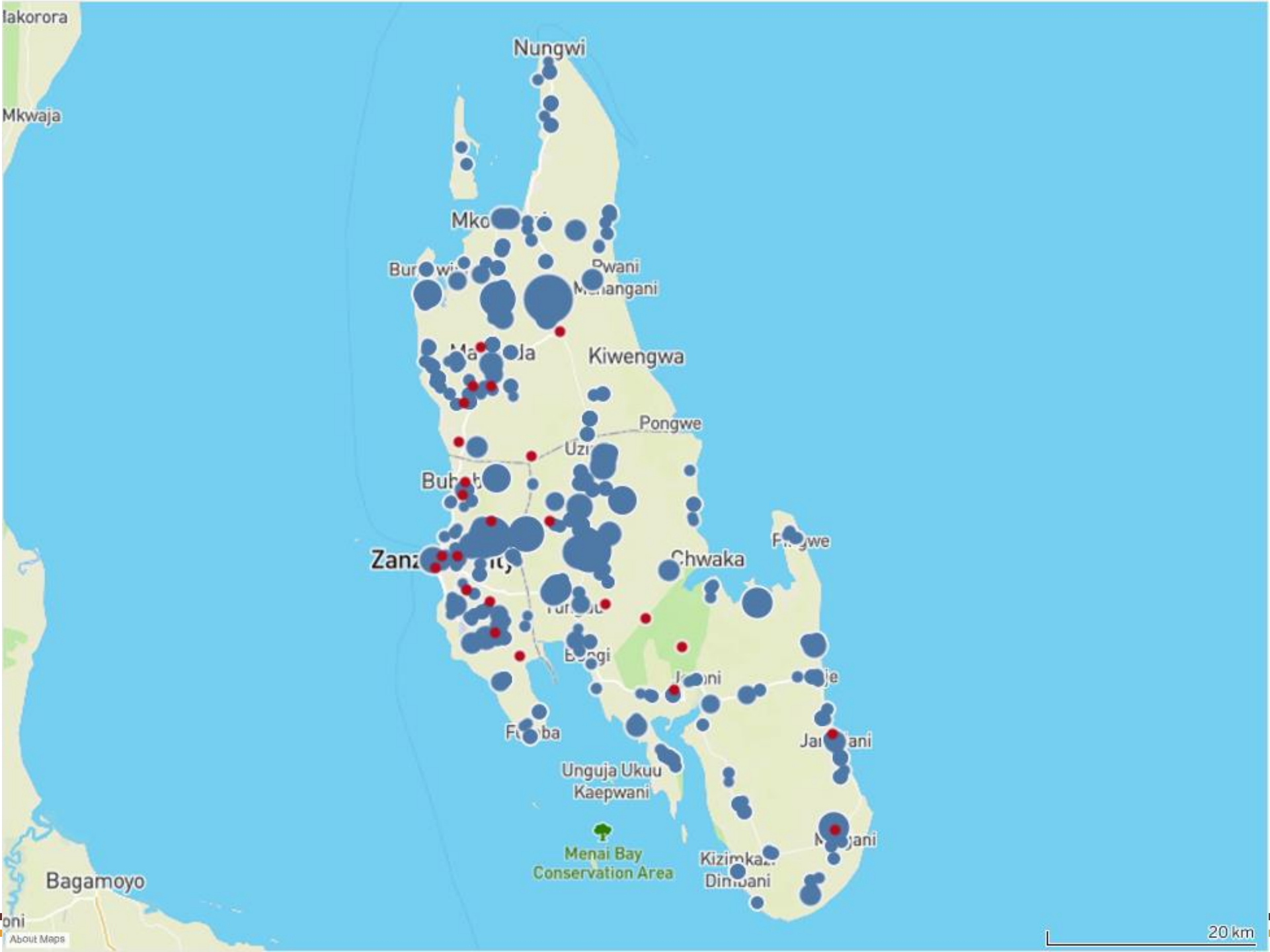


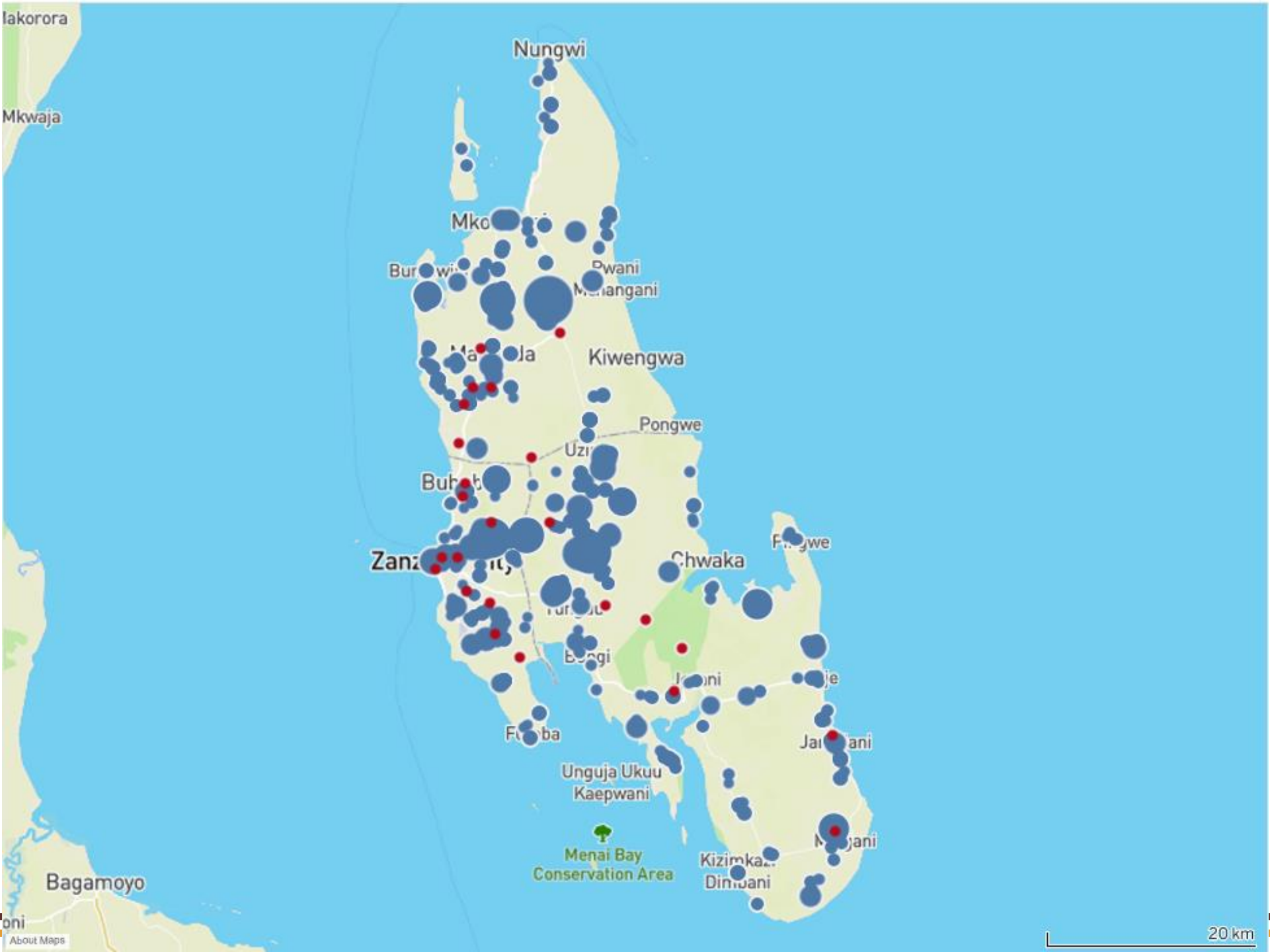


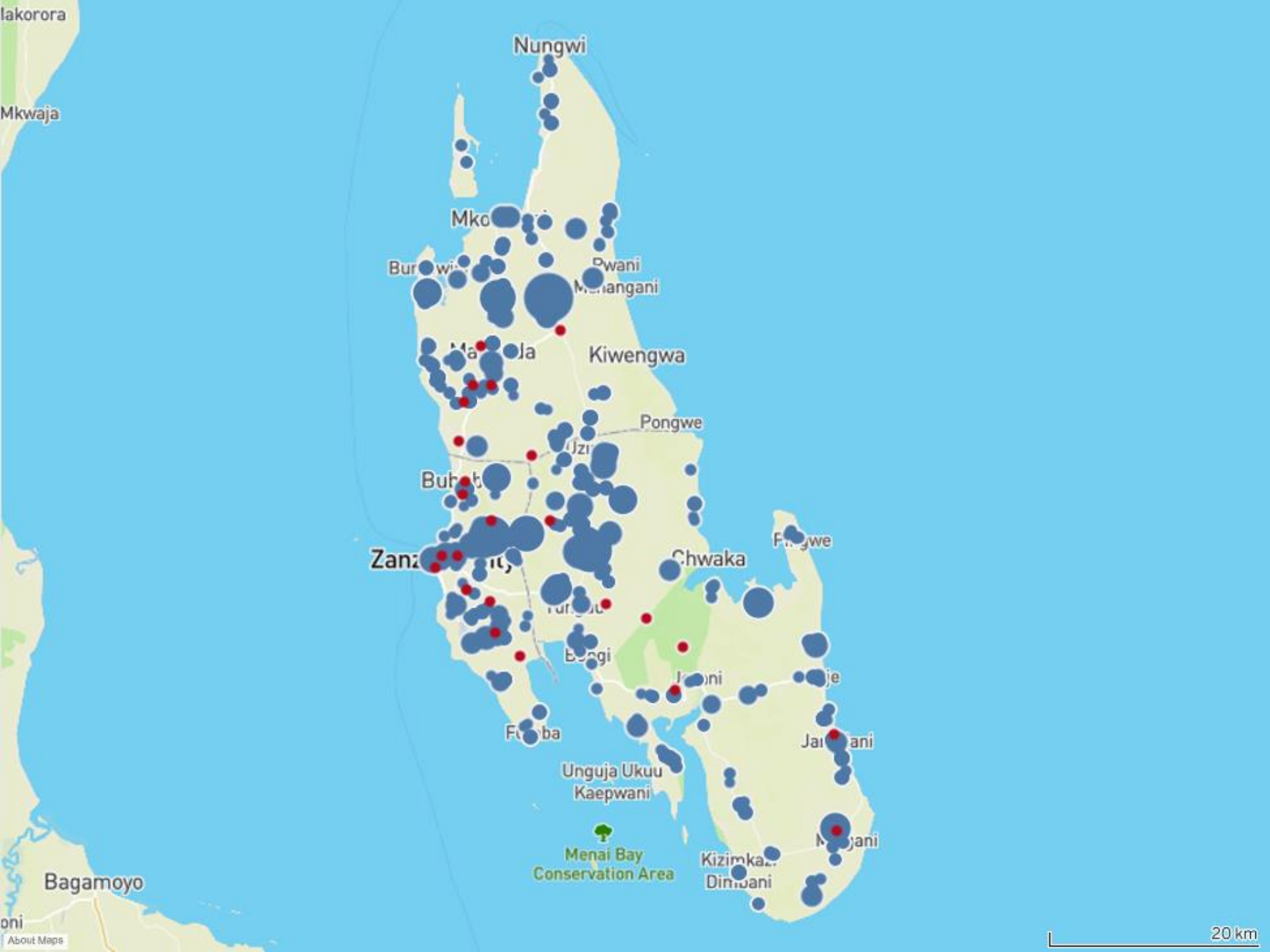






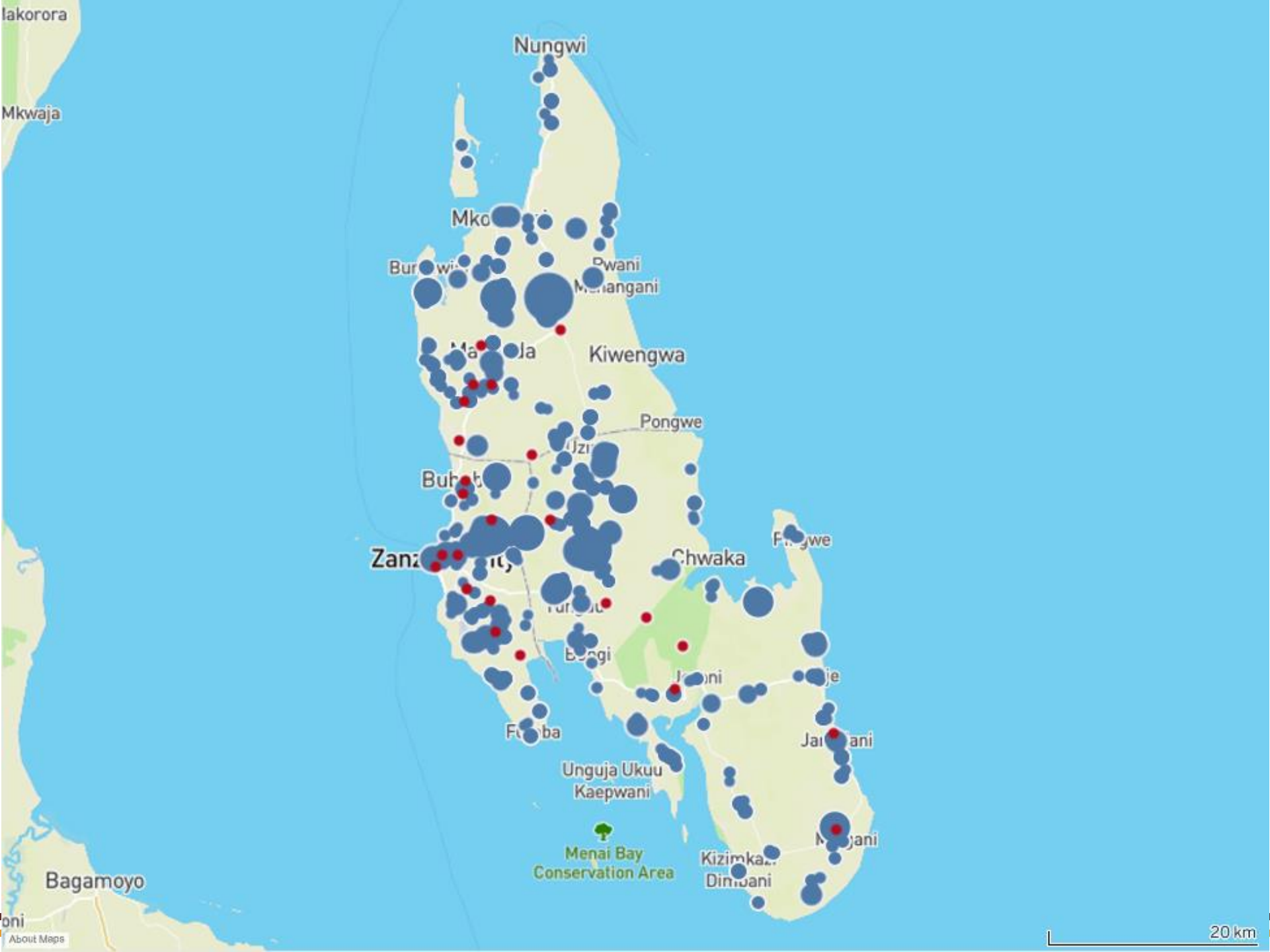


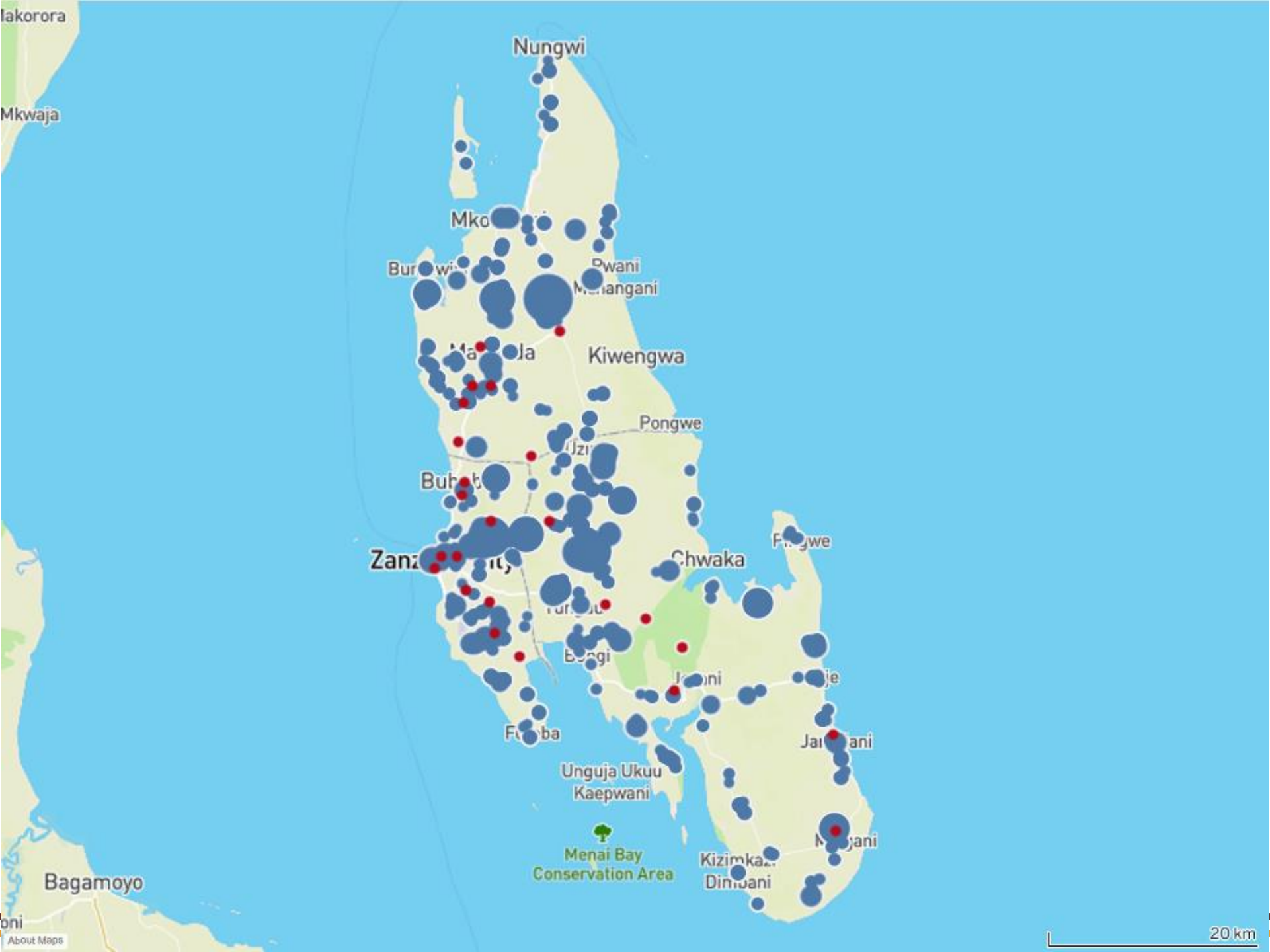


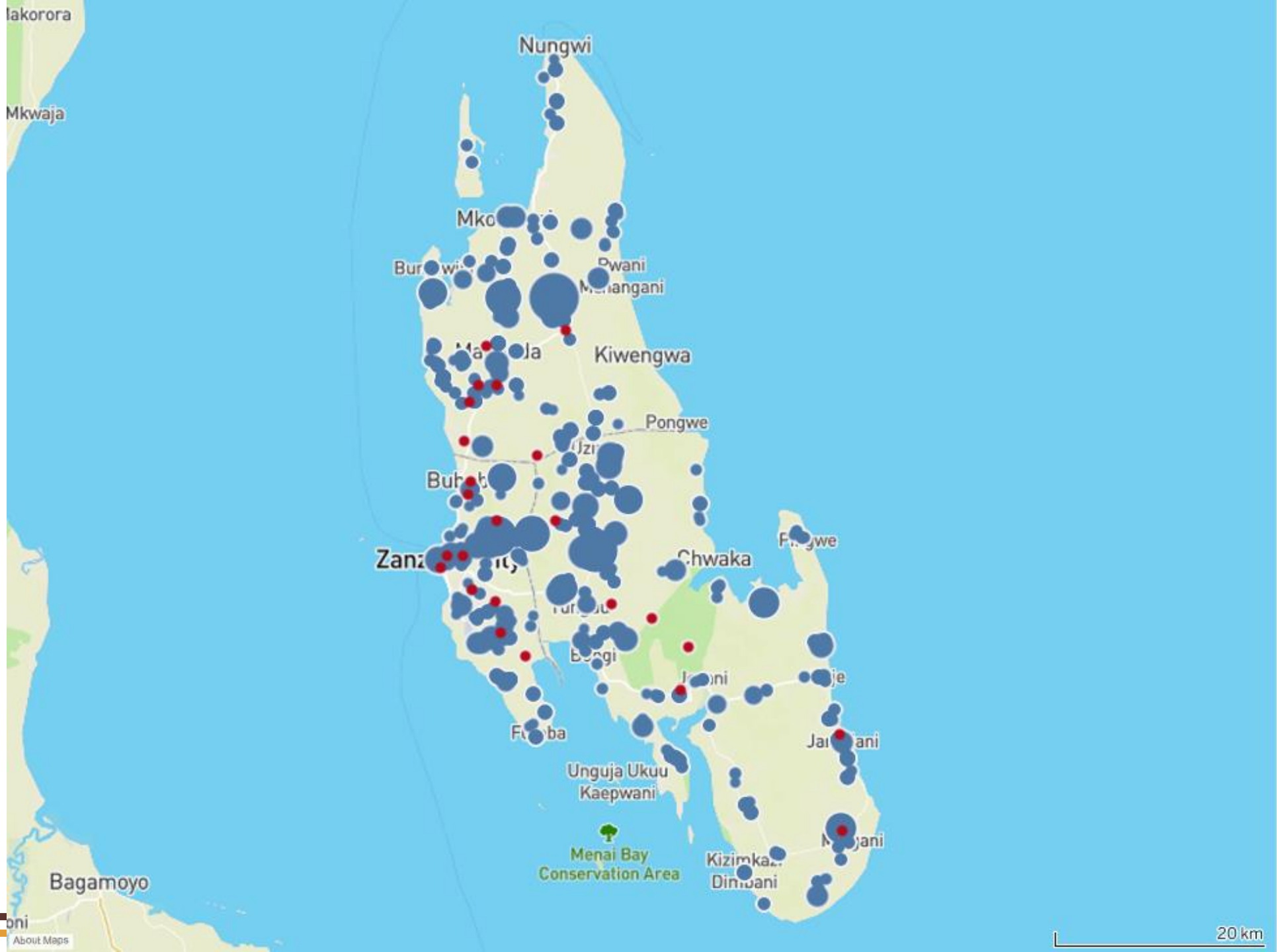


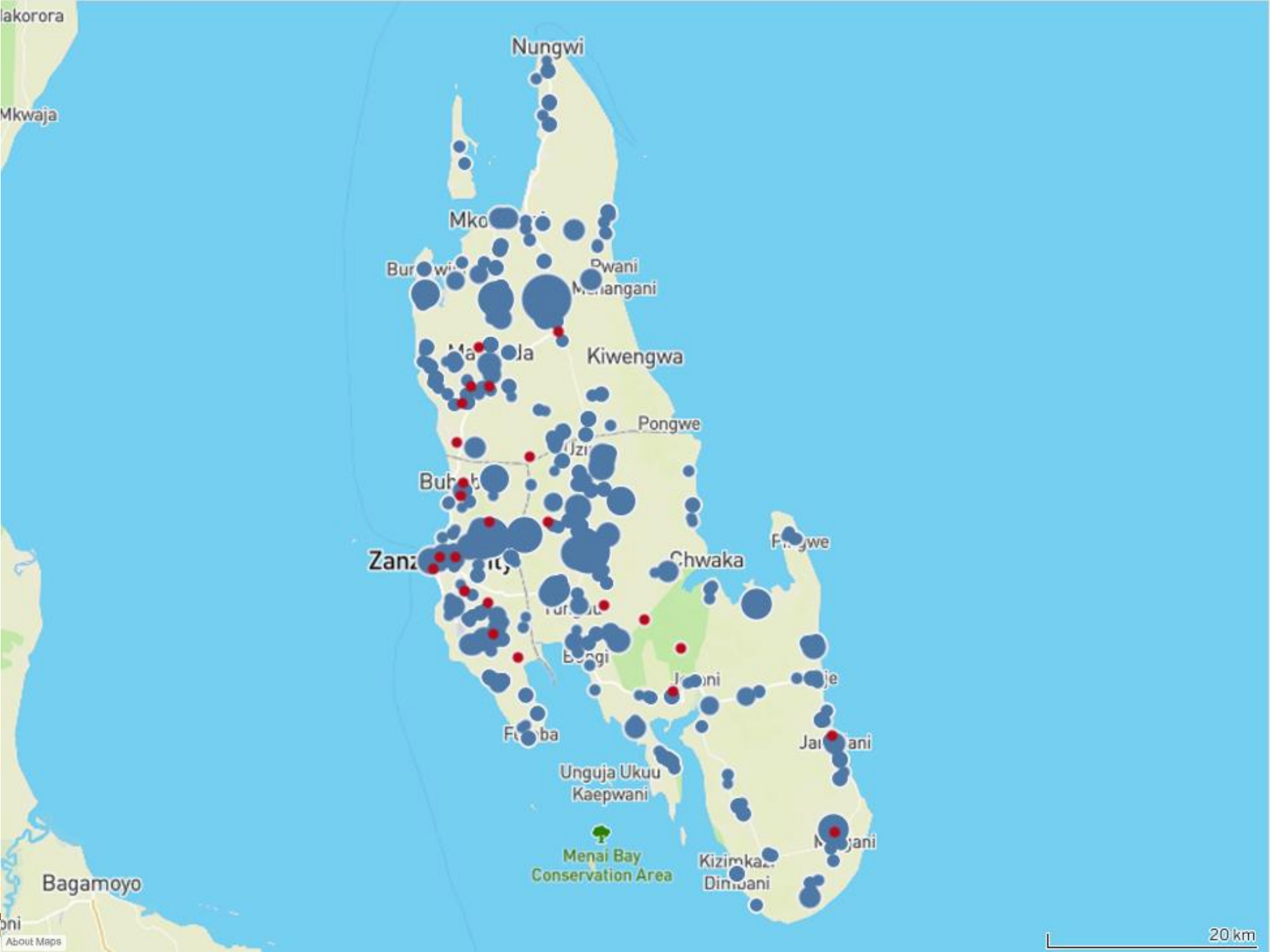
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About Maps



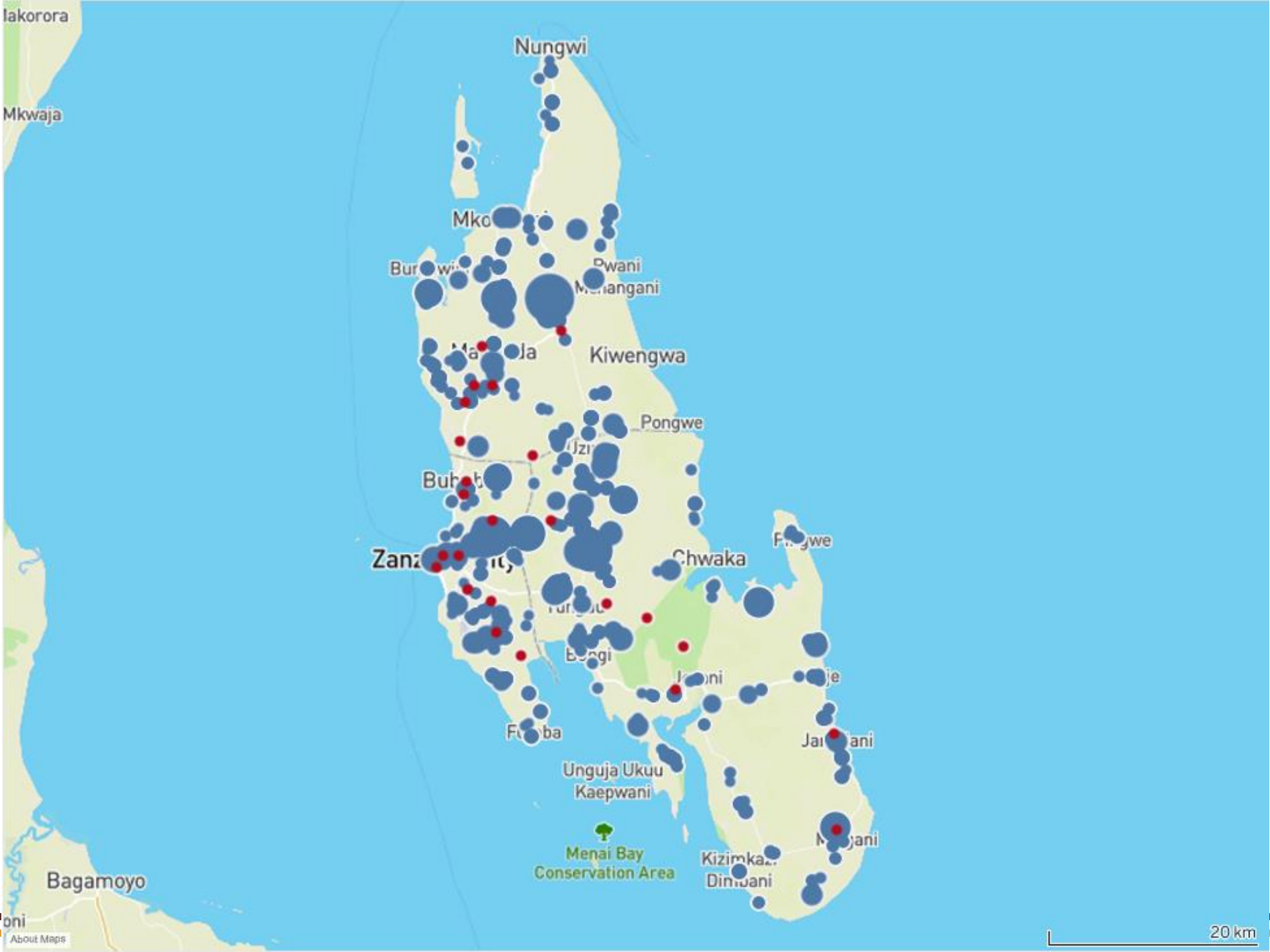


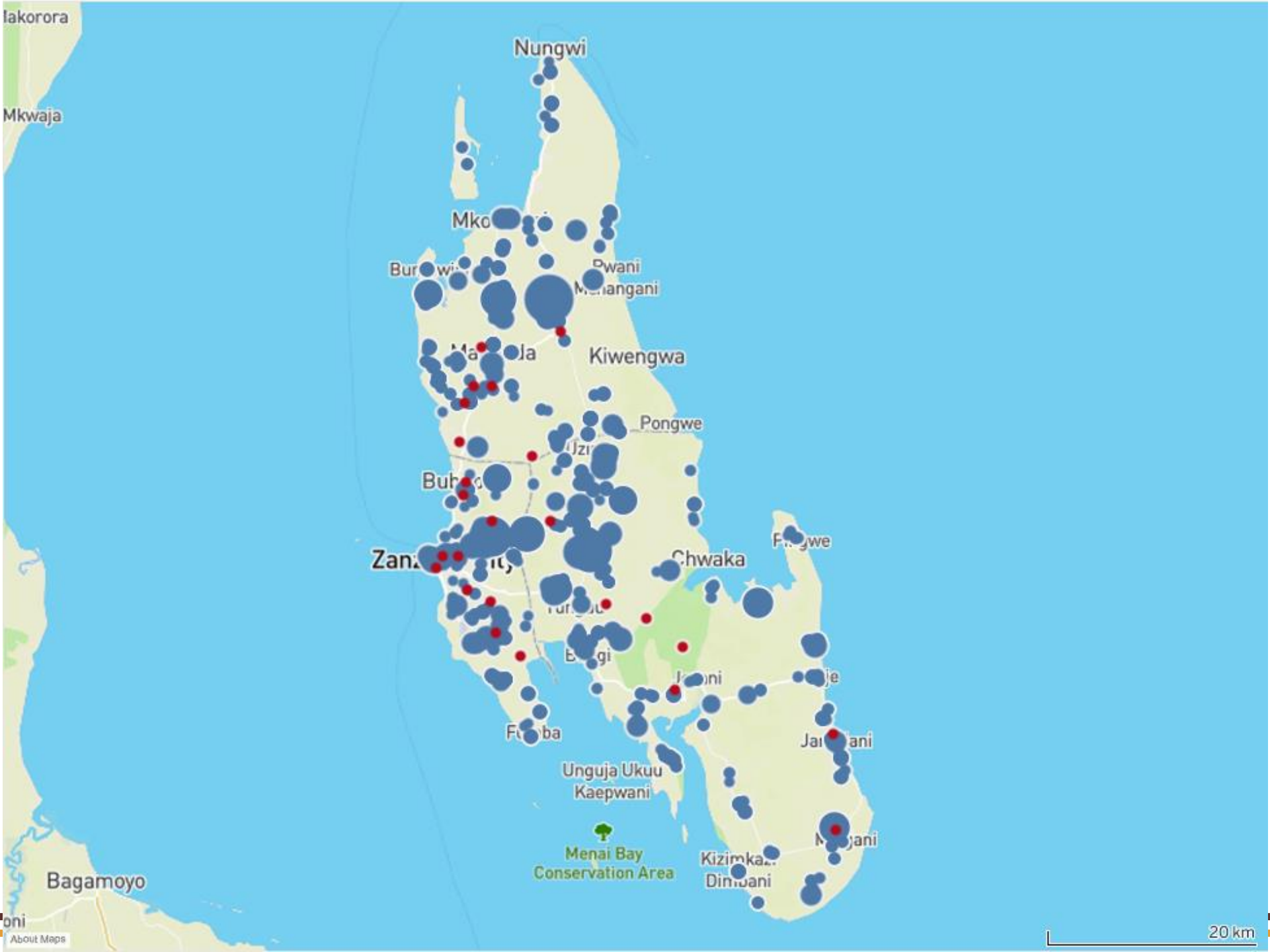


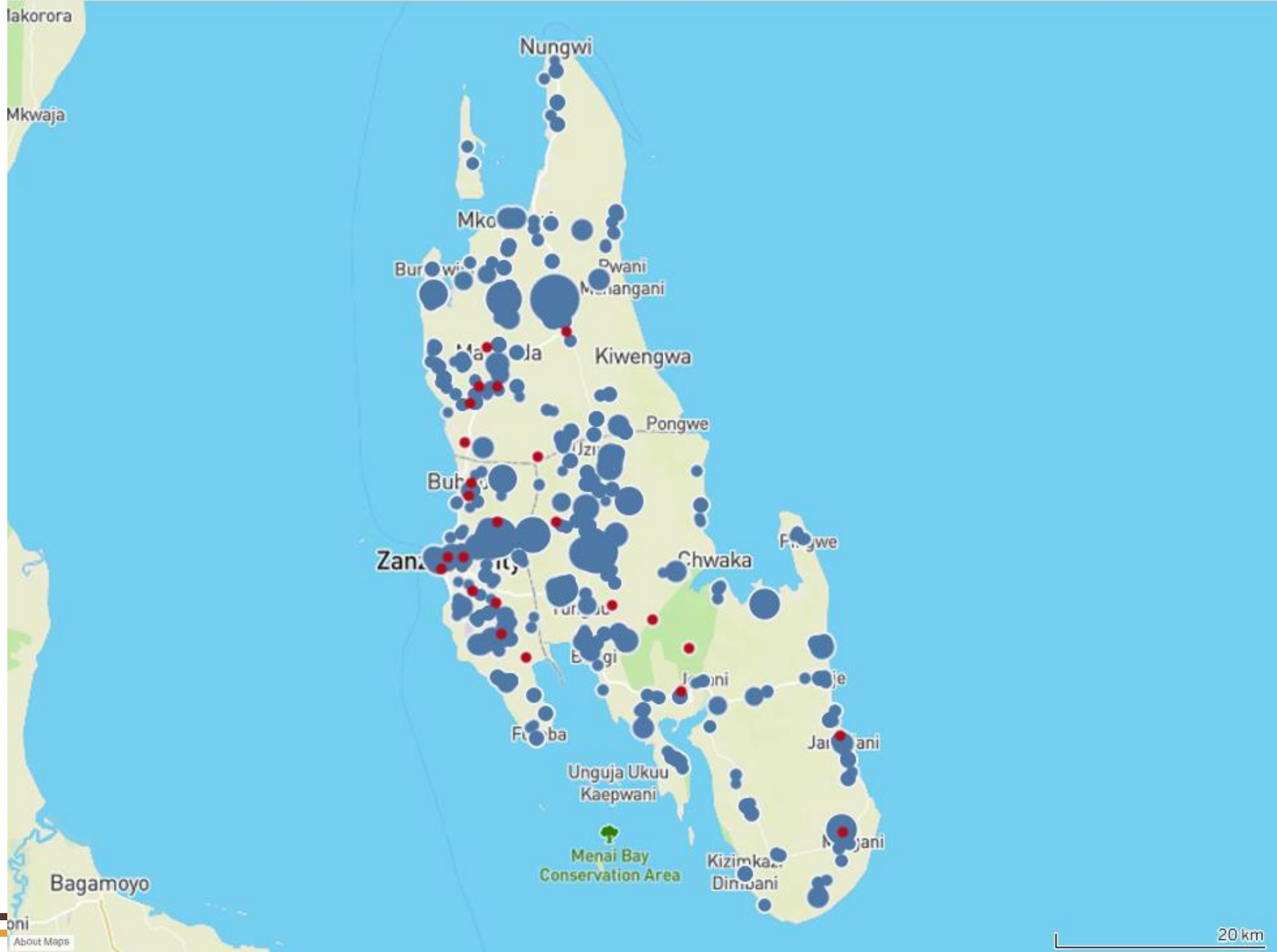


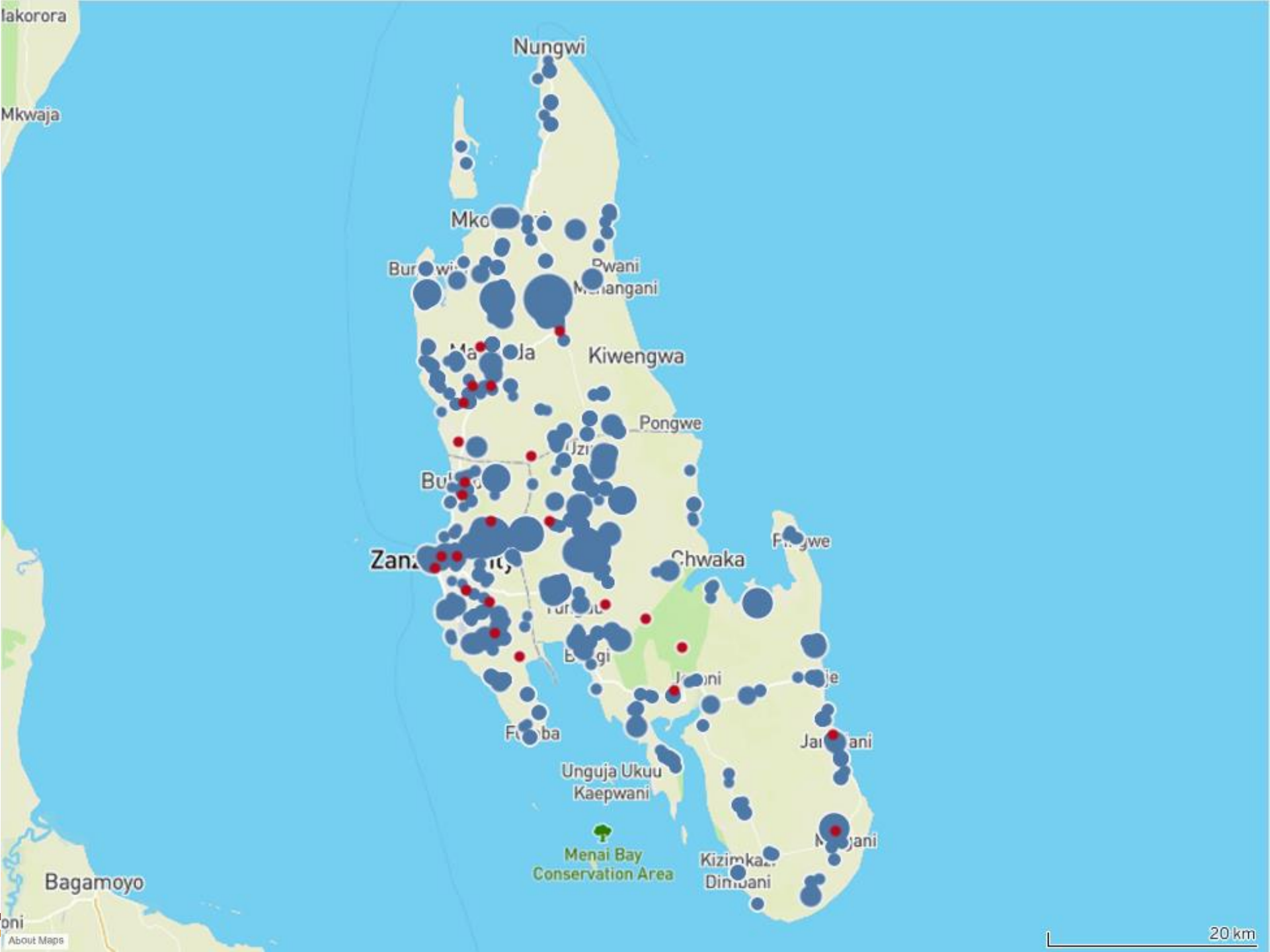
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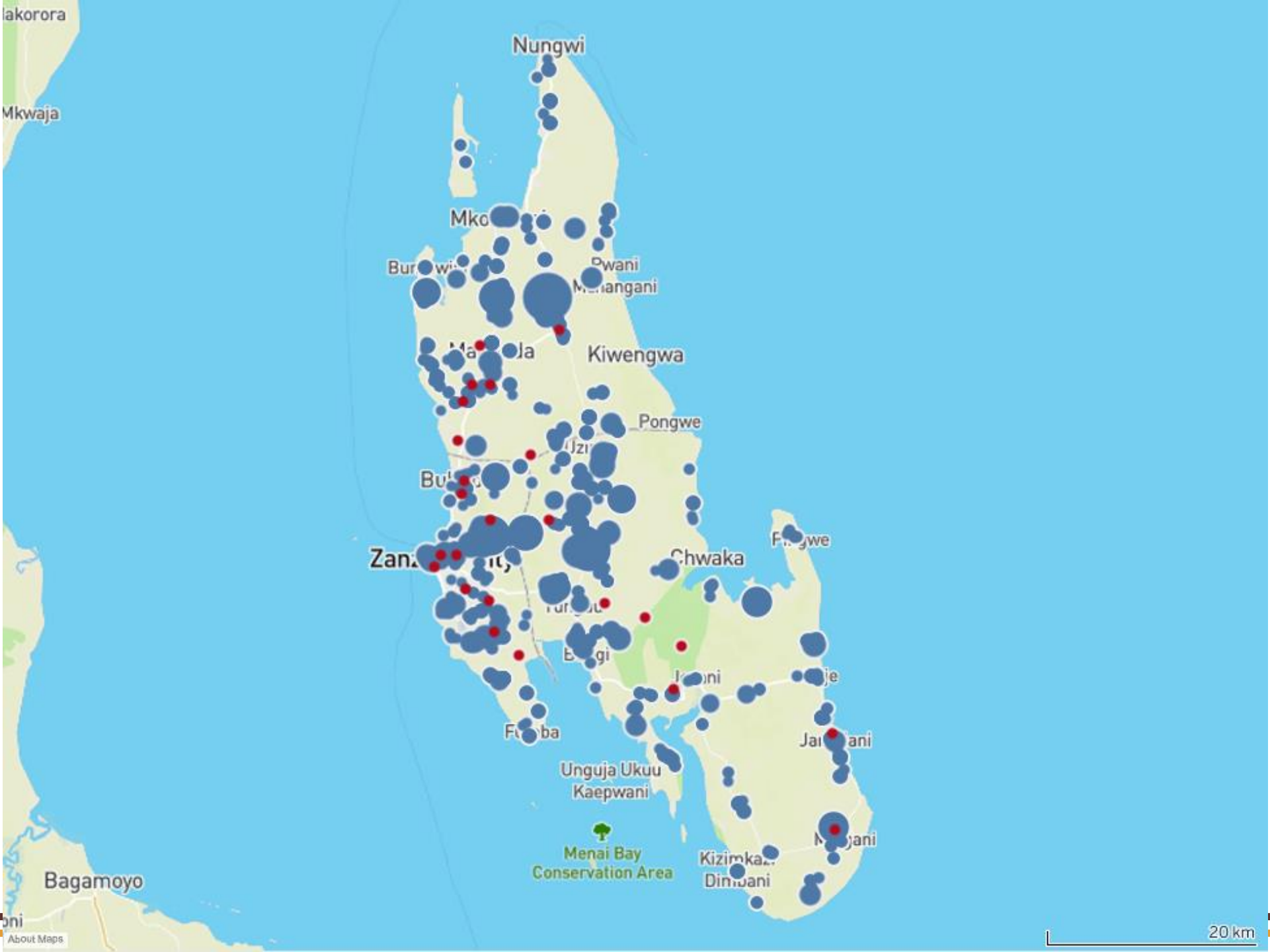
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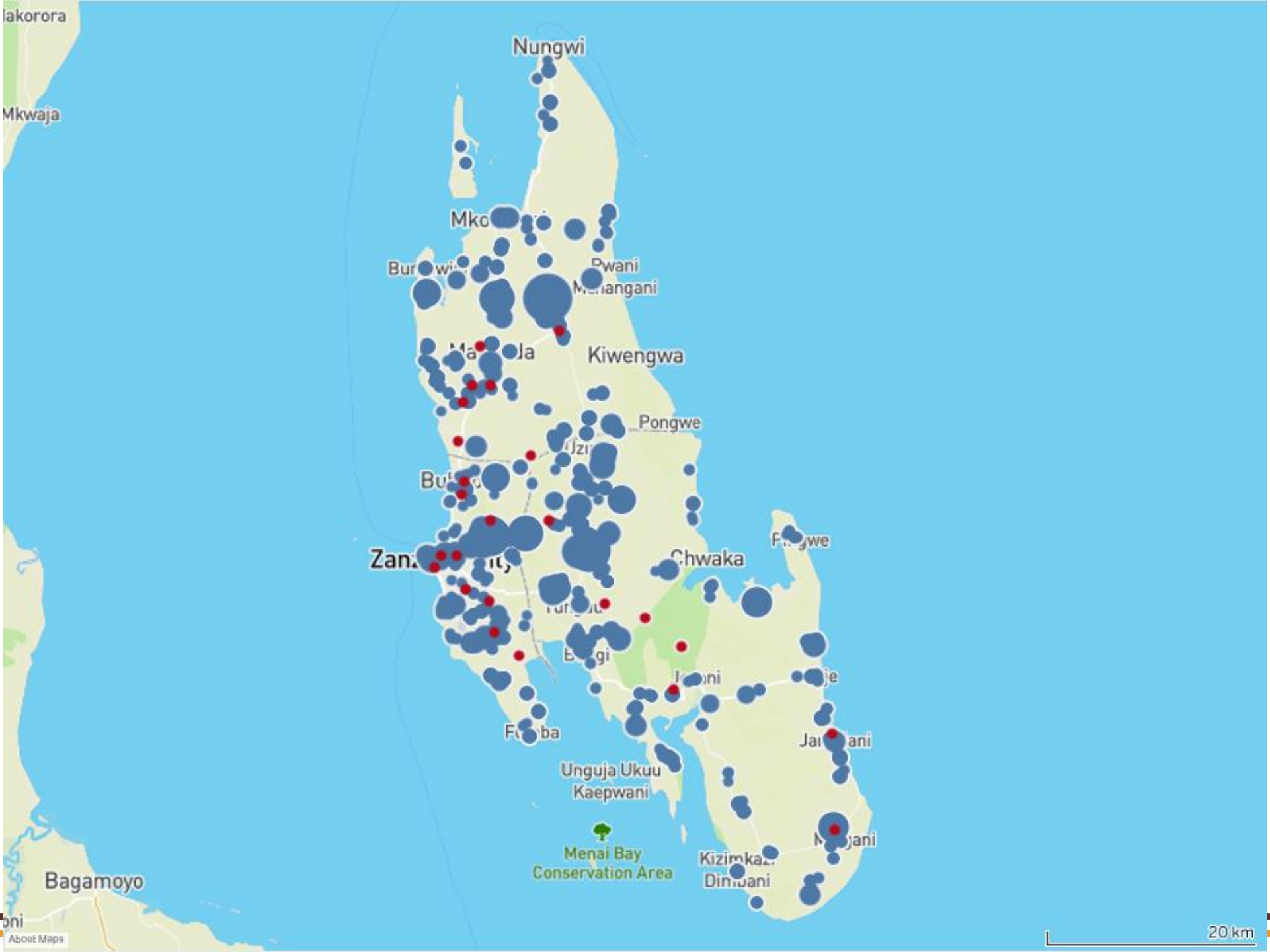


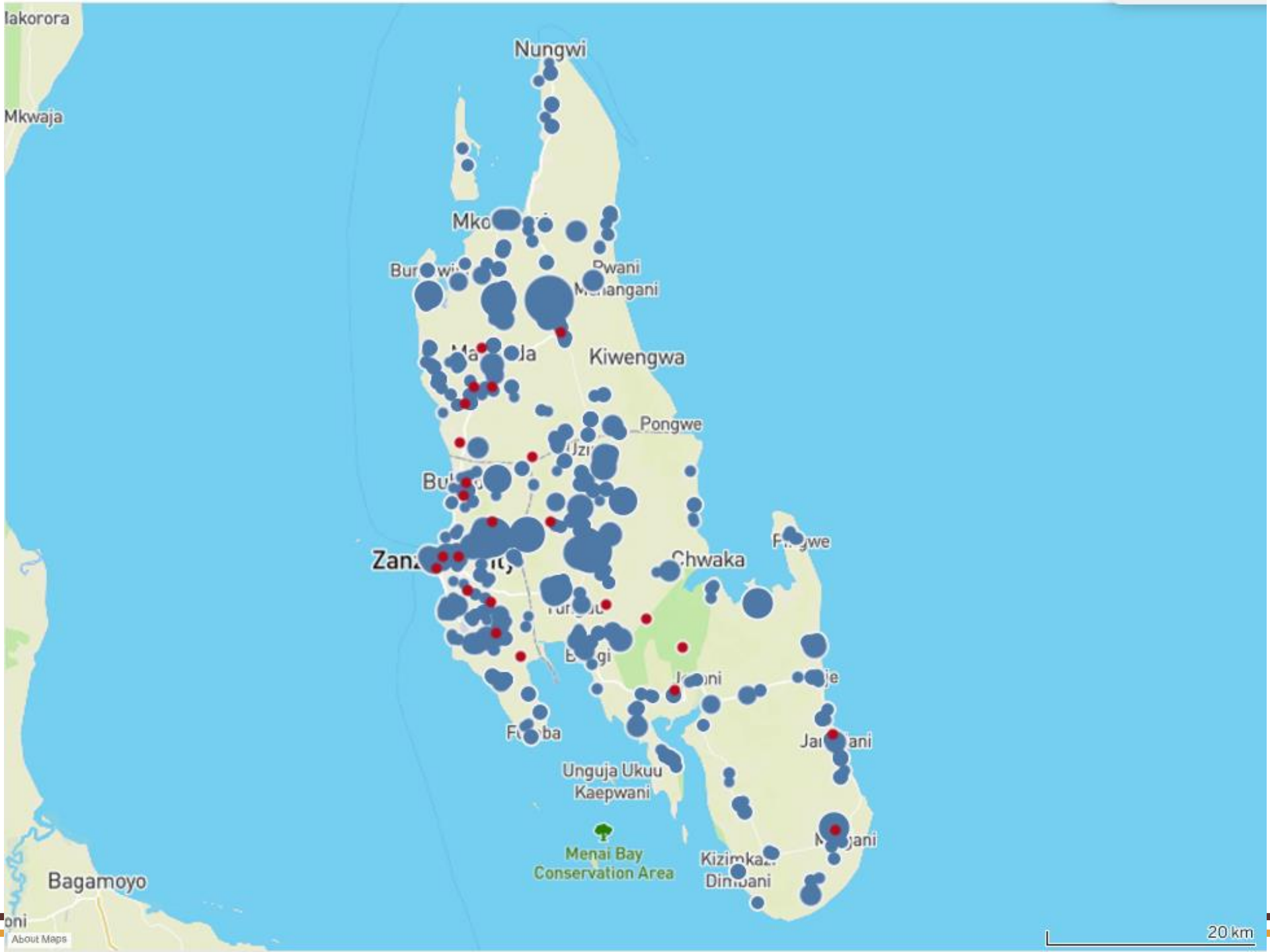


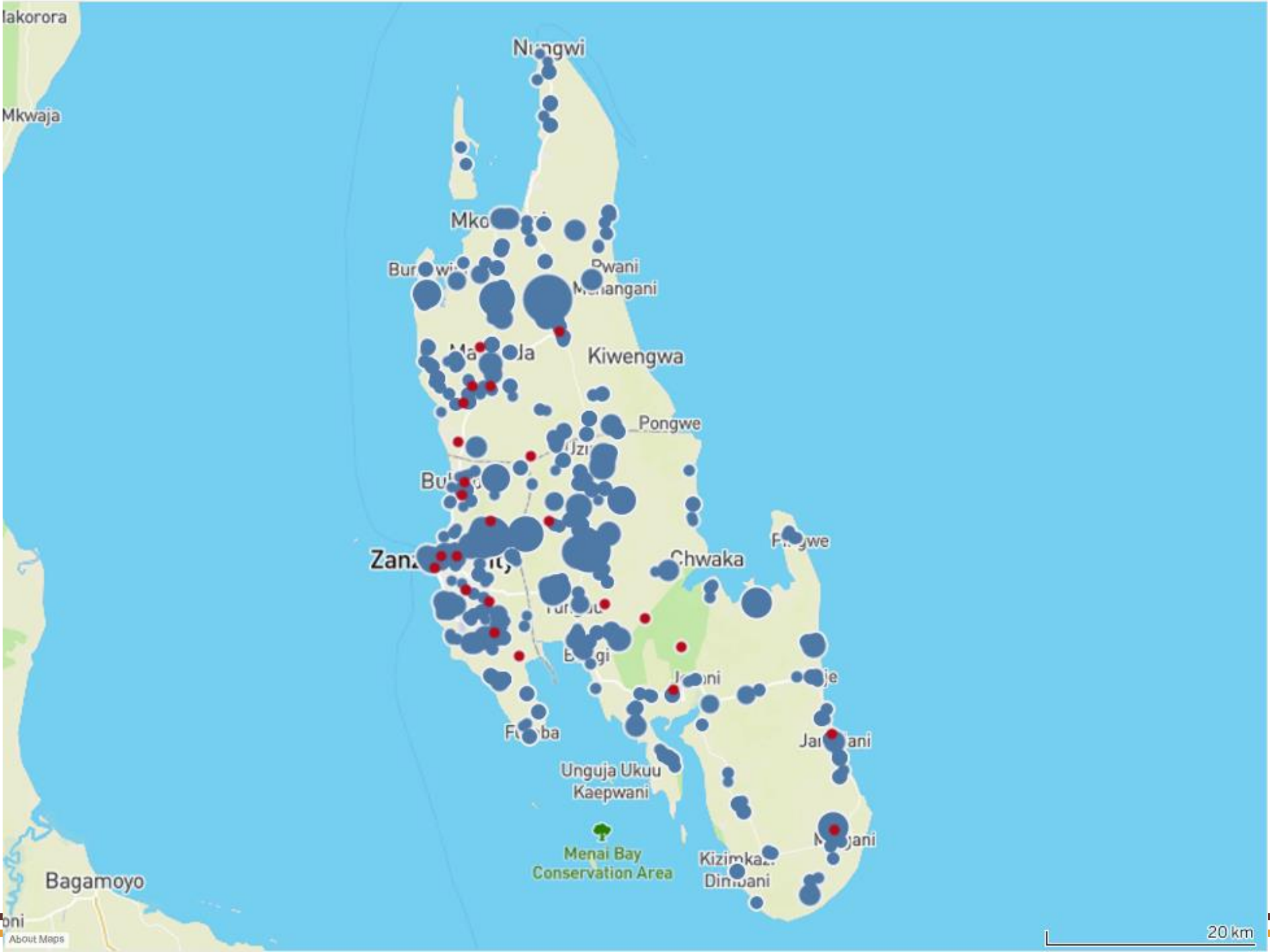


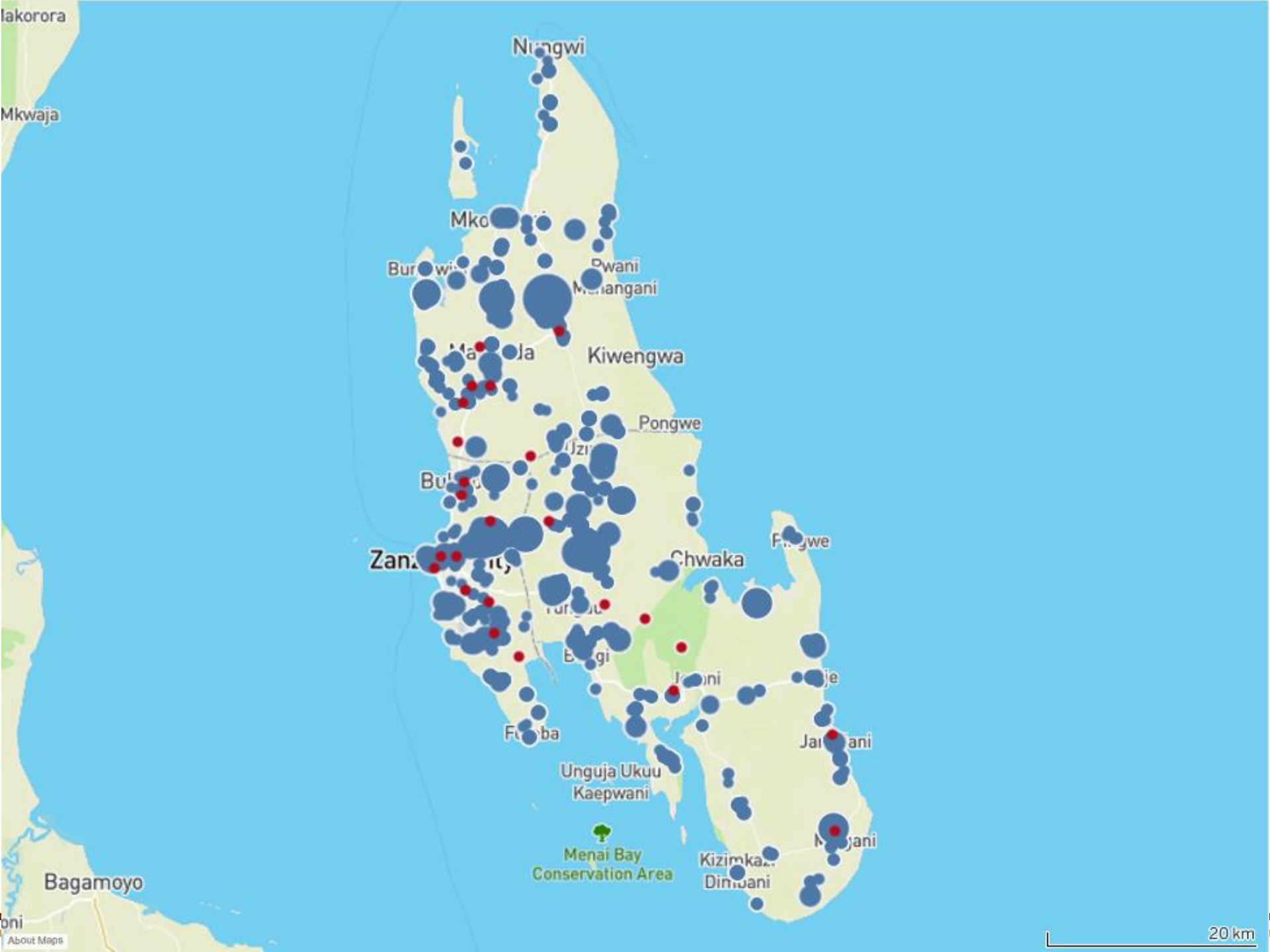


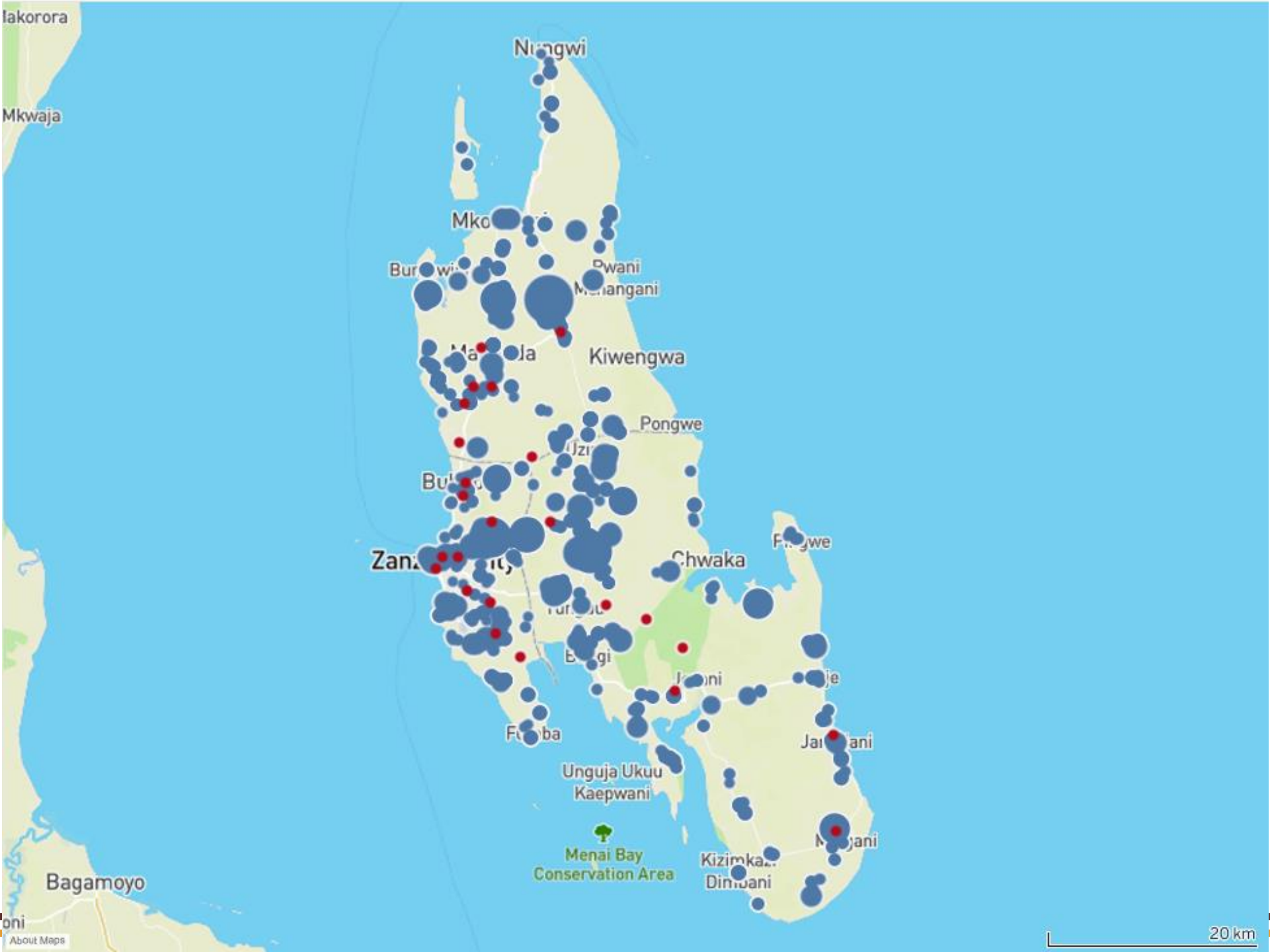


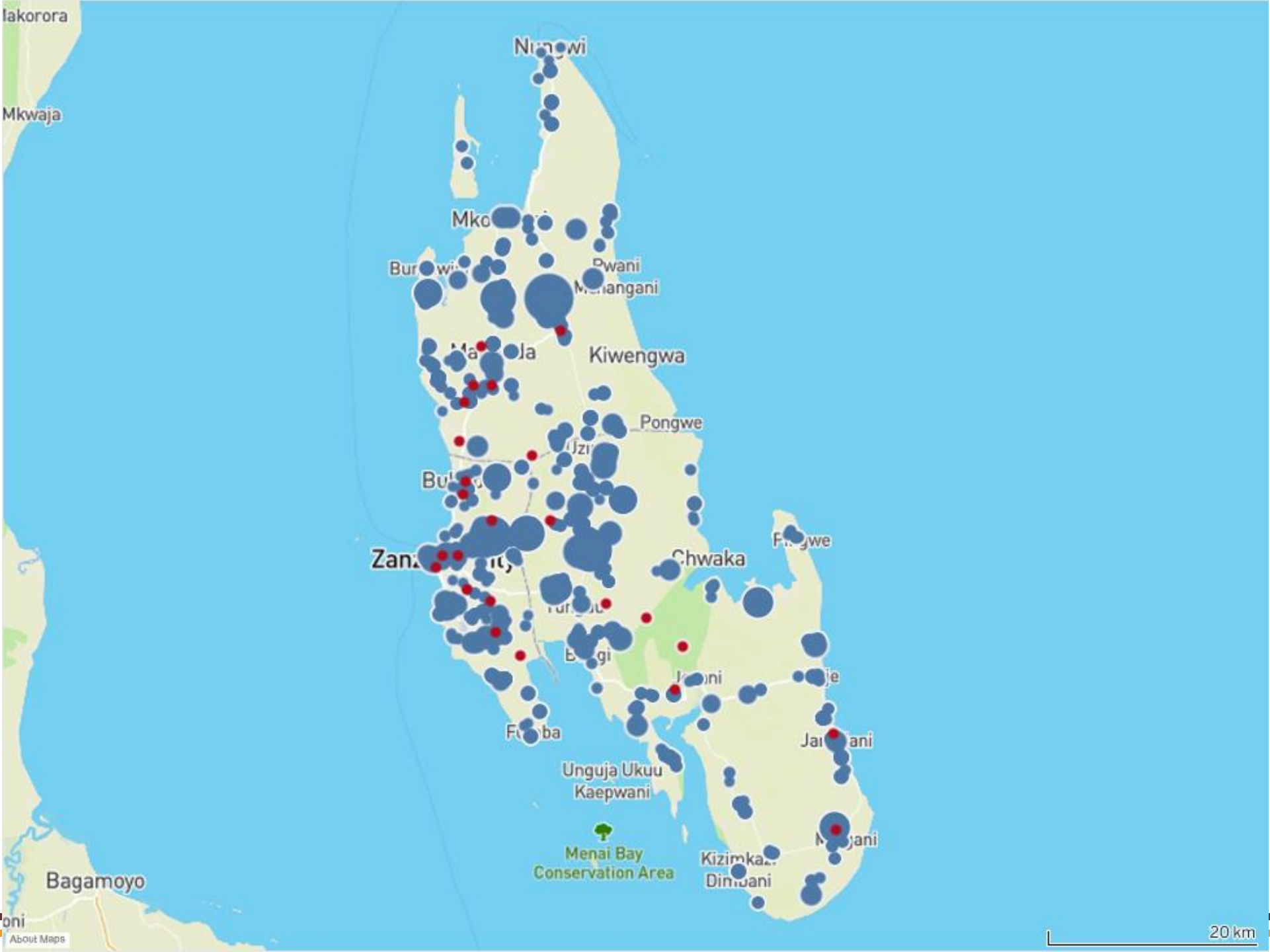


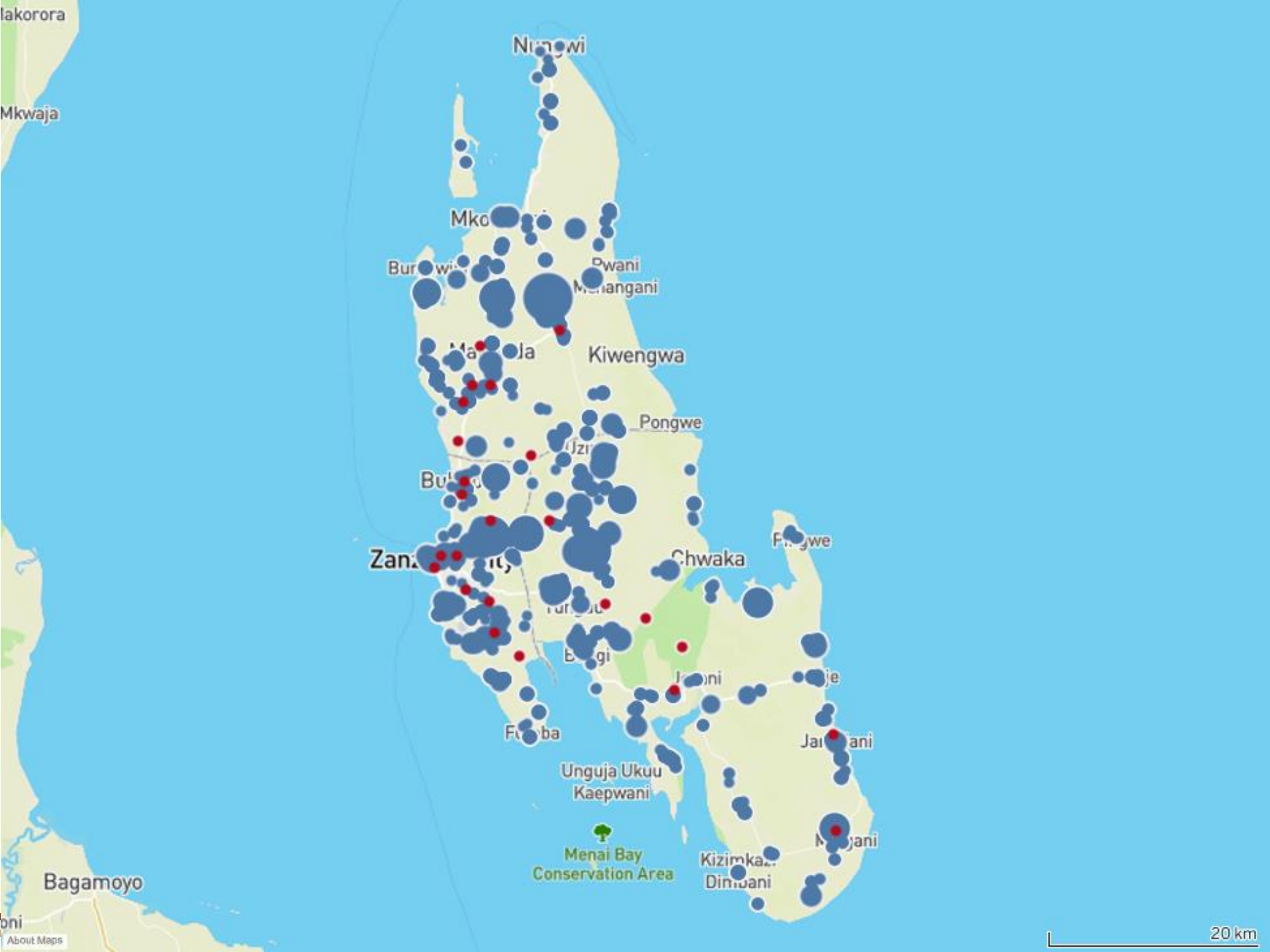


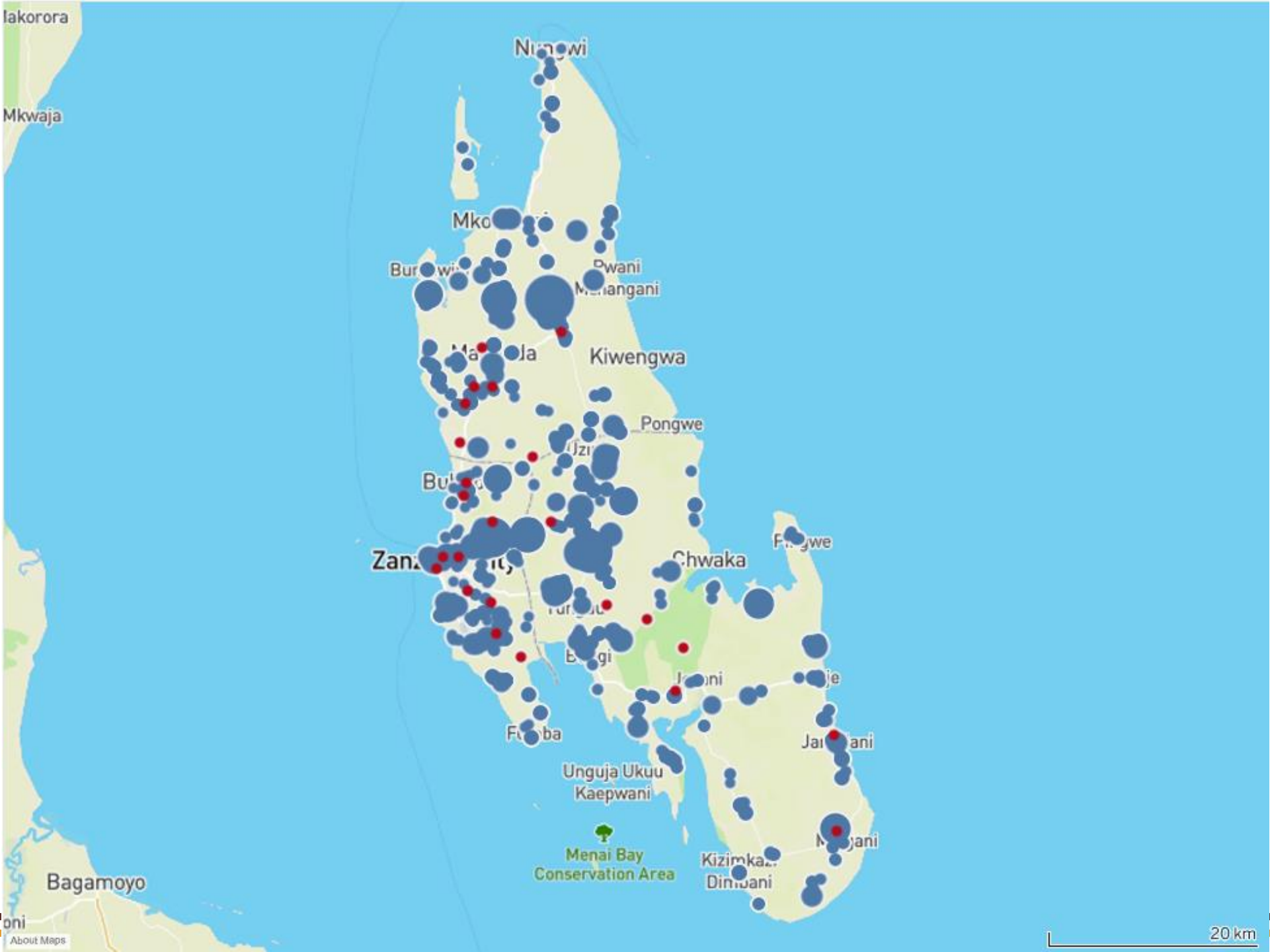


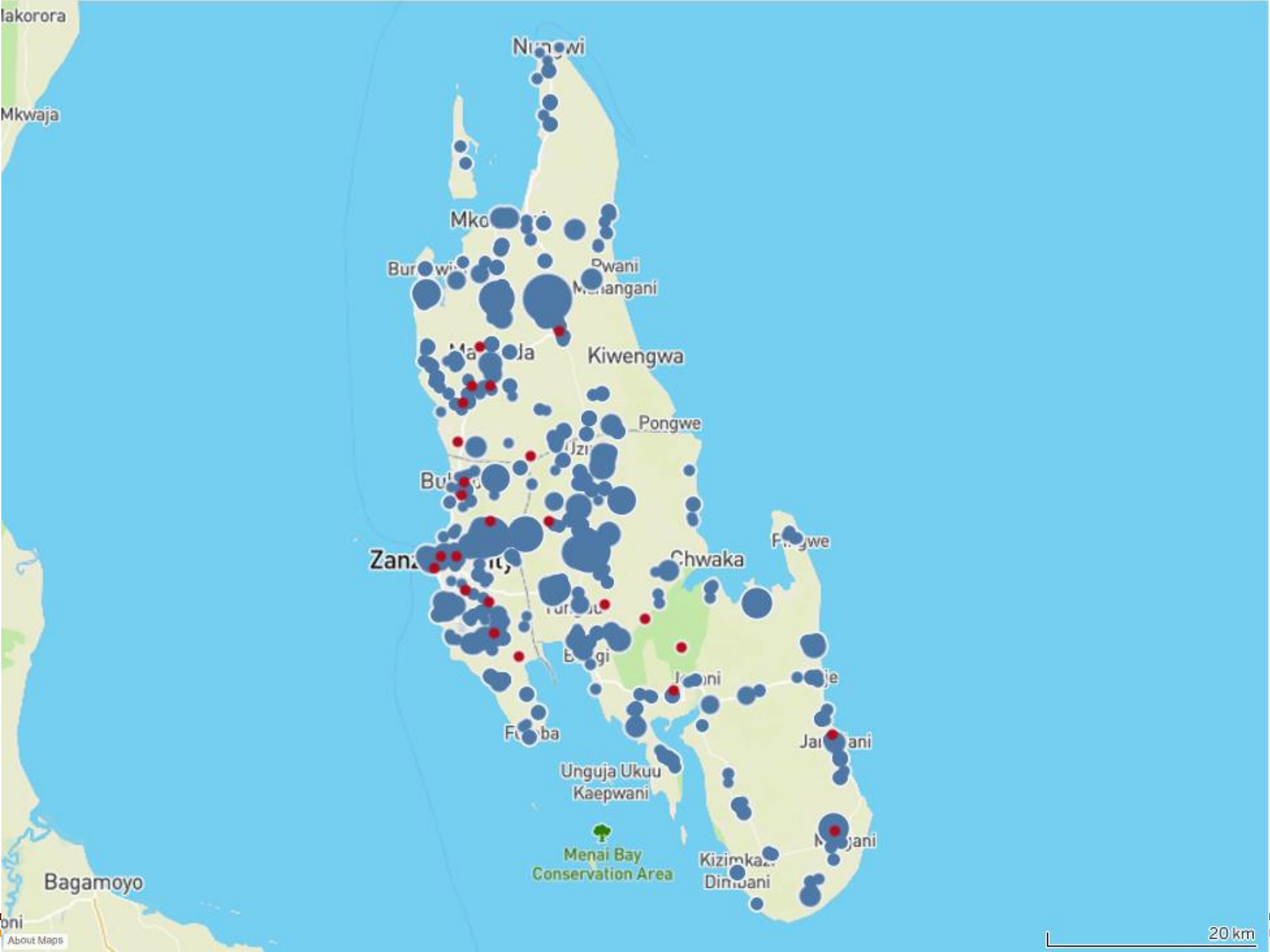












Iakorora

Mkwaja

Ningwi

Mkoani

Burwani

Pwani

Mchanganani

Maji

Kiwengwa

Pongwe

Burwani

Ijzi

Zanzibar City

Chwaka

Fingwe

Uruju

Bangi

Jani

Fumba

Jeje

Jaijani

Unguja Ukuu
Kaepwani

Menai Bay
Conservation Area

Kizimkani
Dinjani

Maji

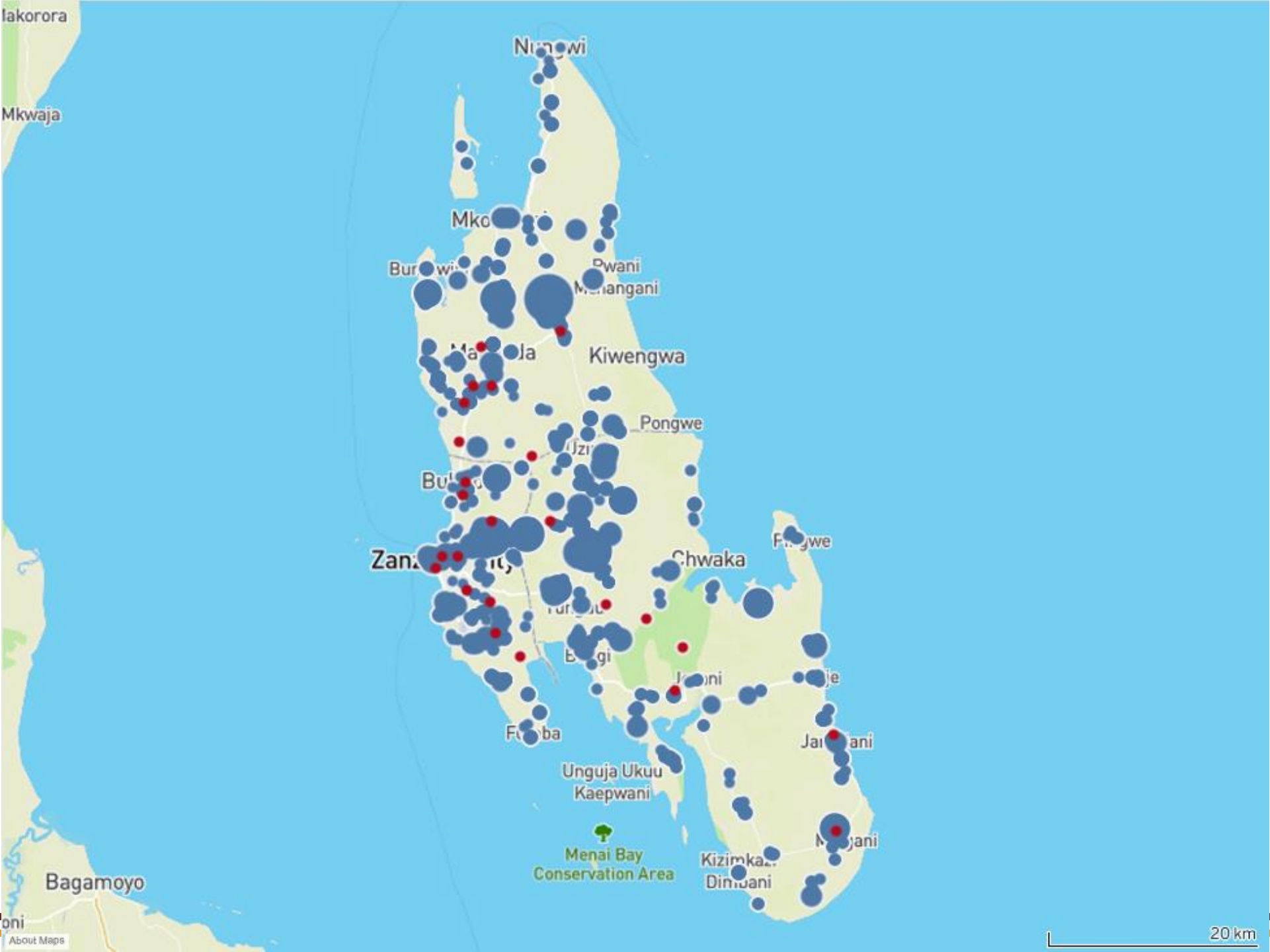
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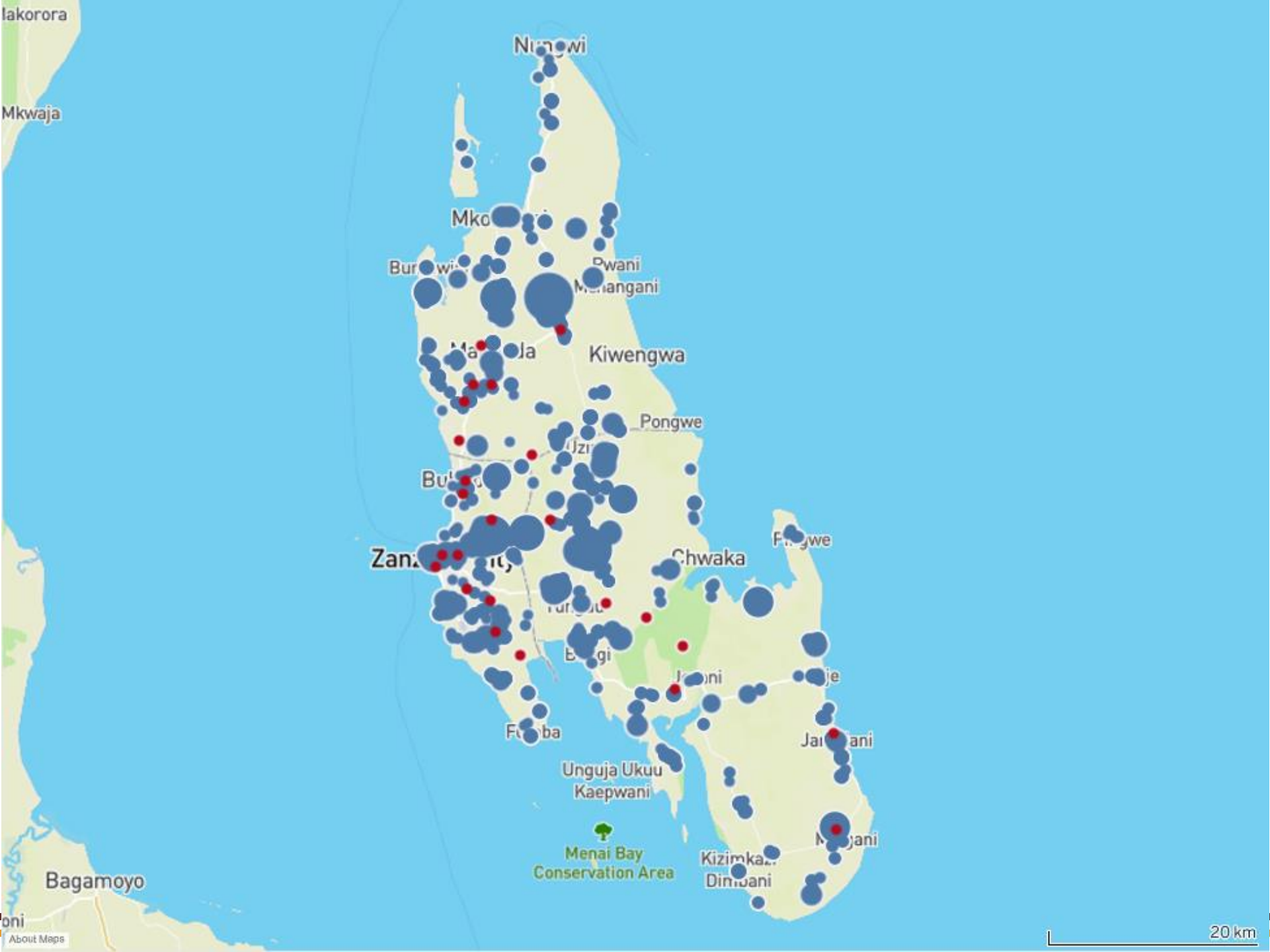
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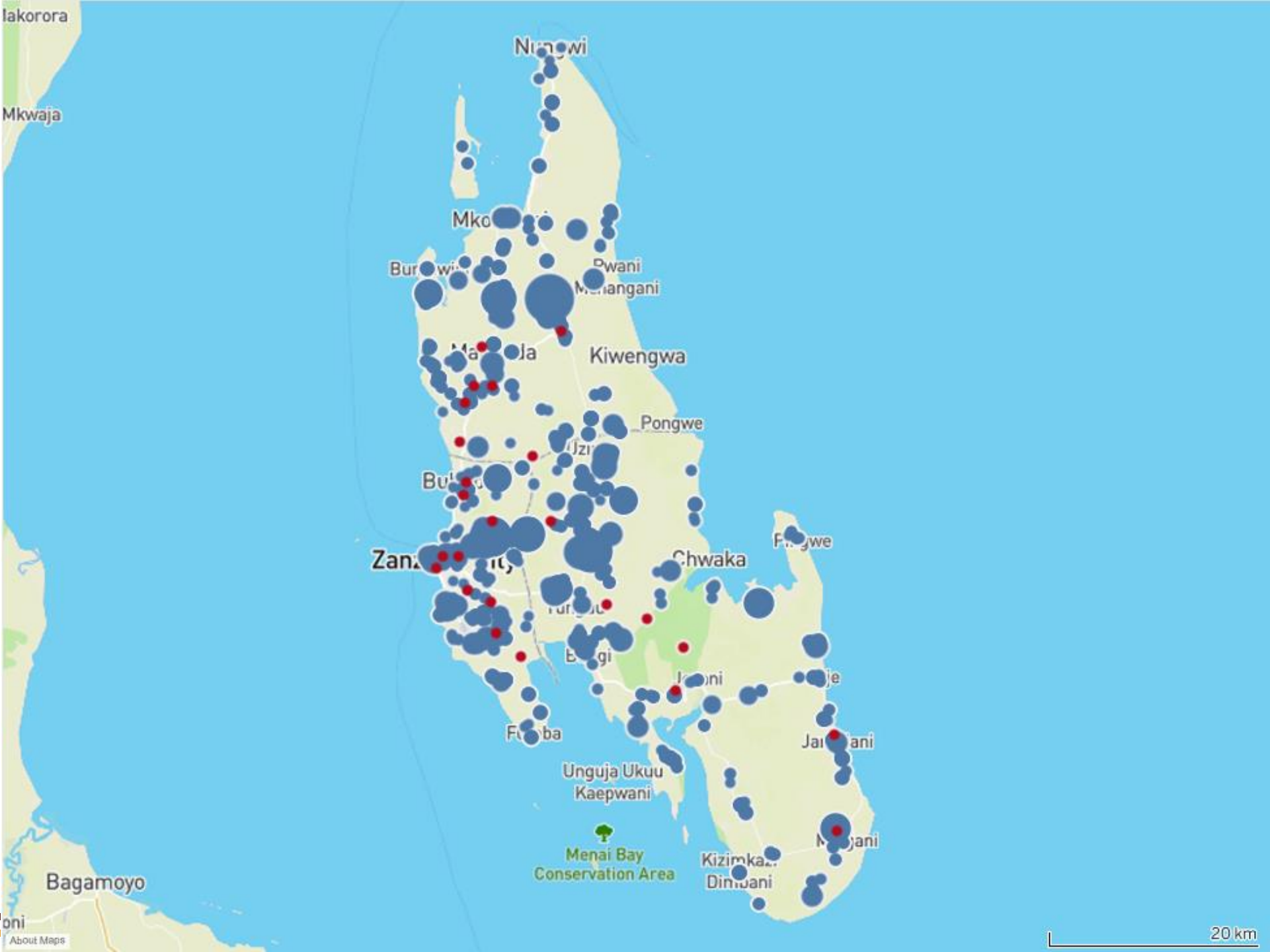
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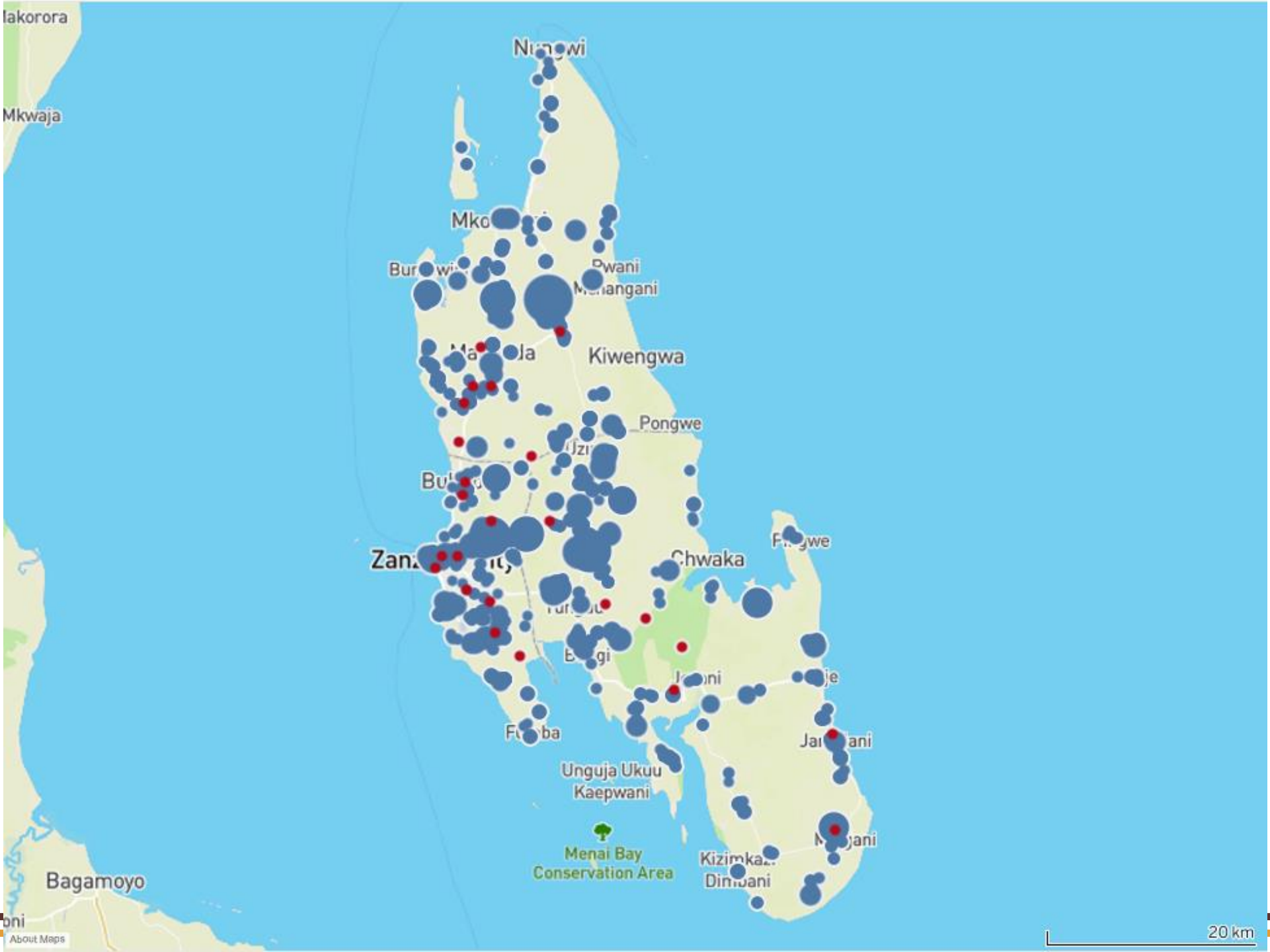
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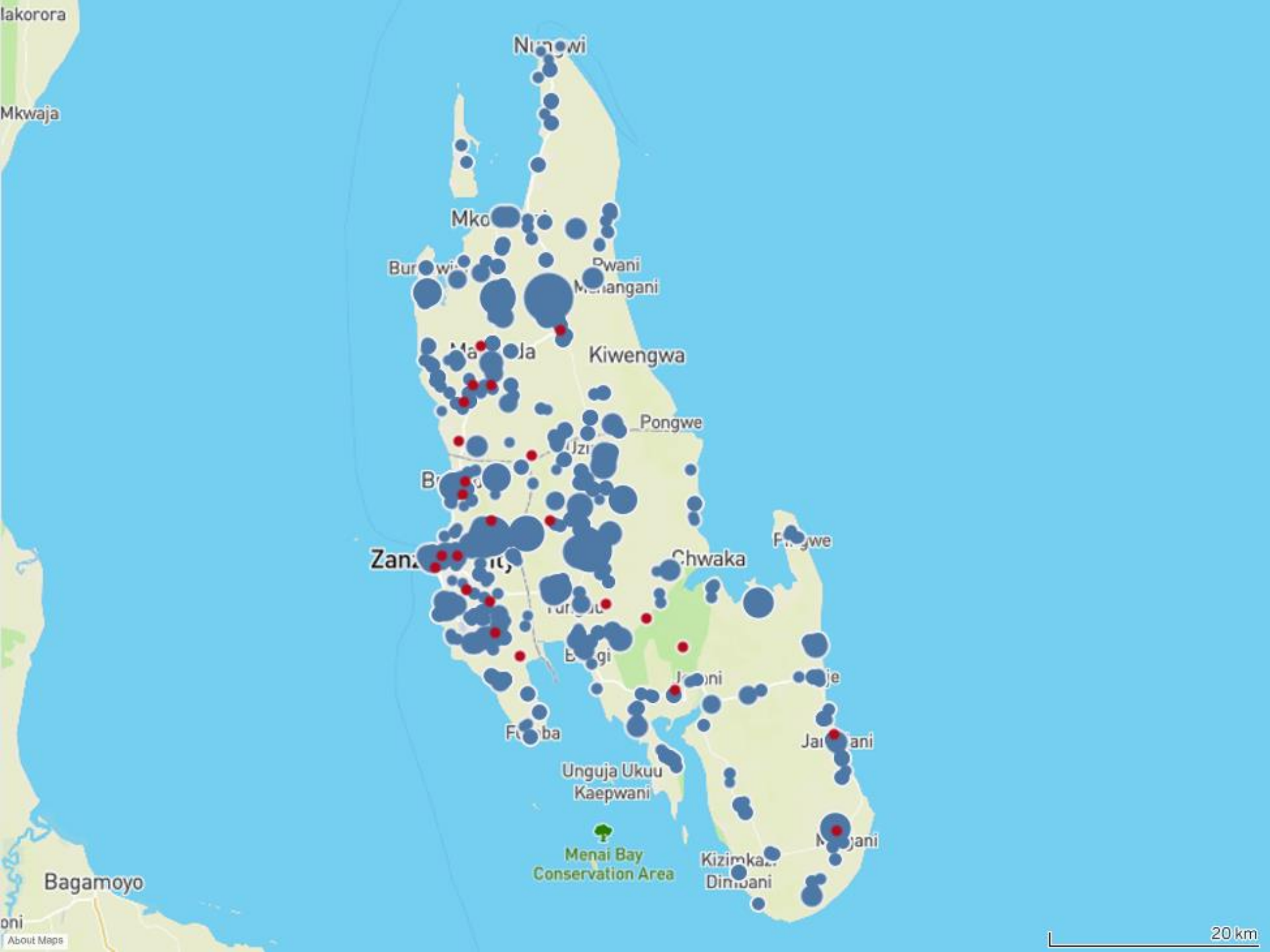


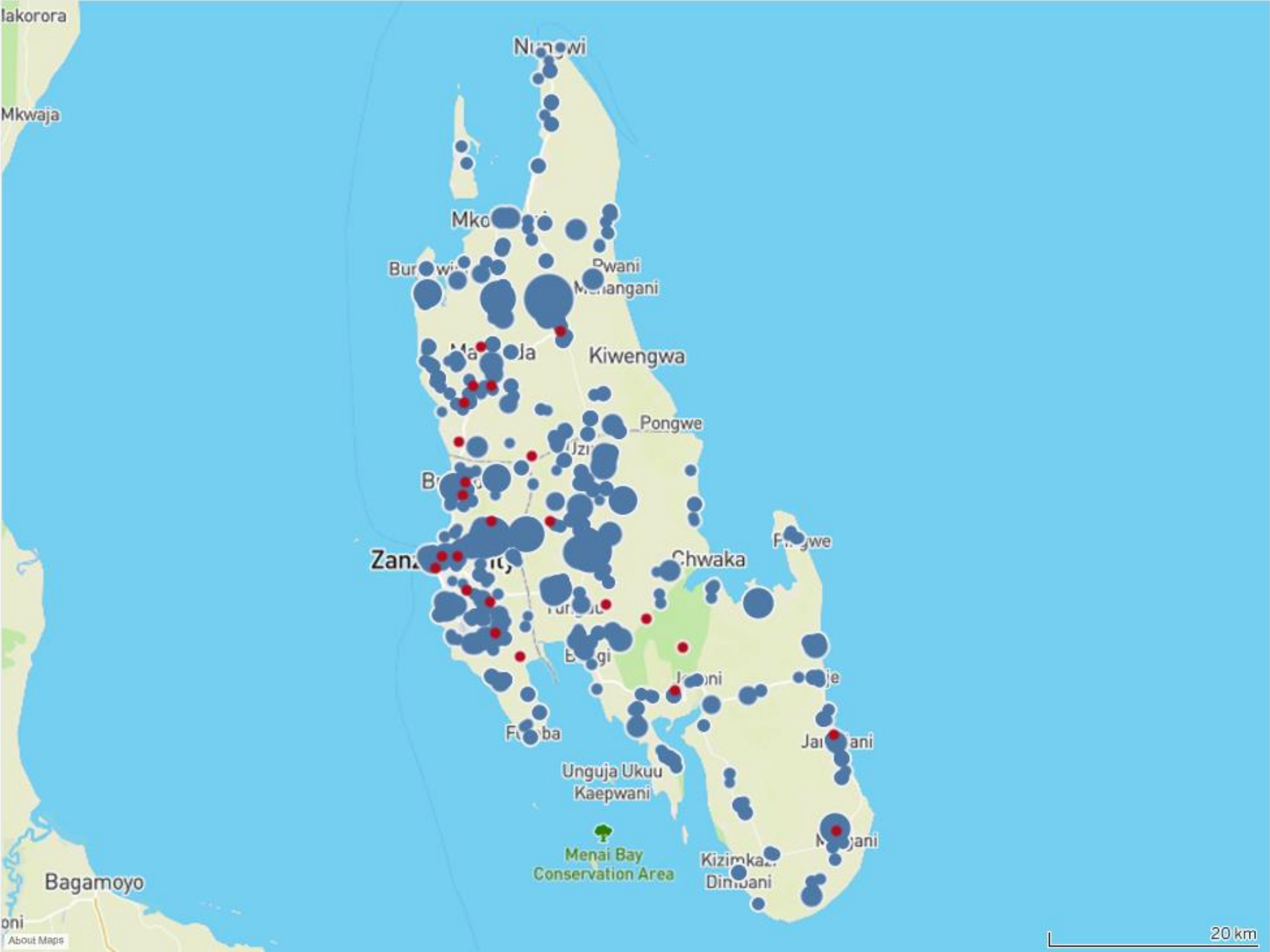


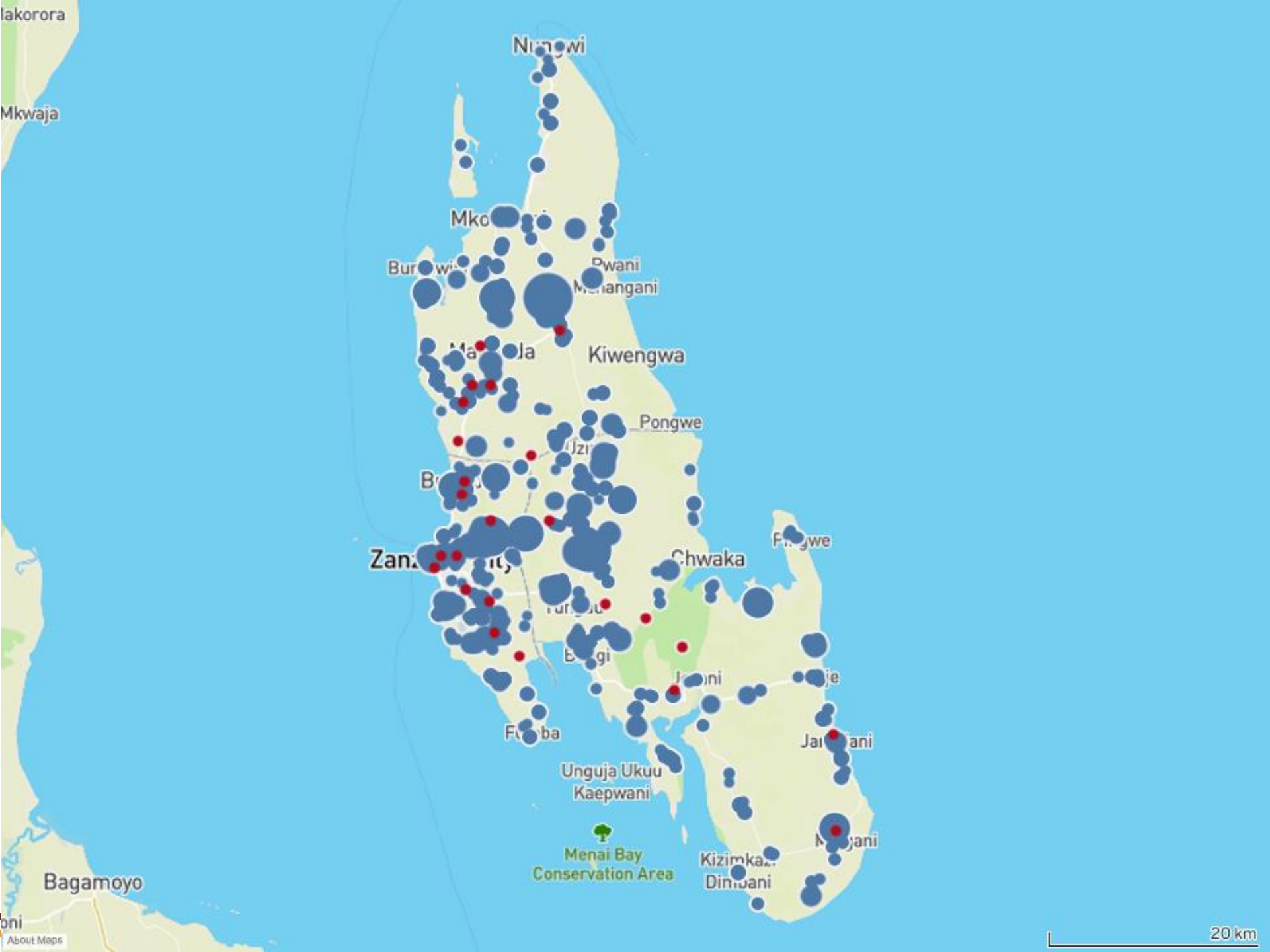


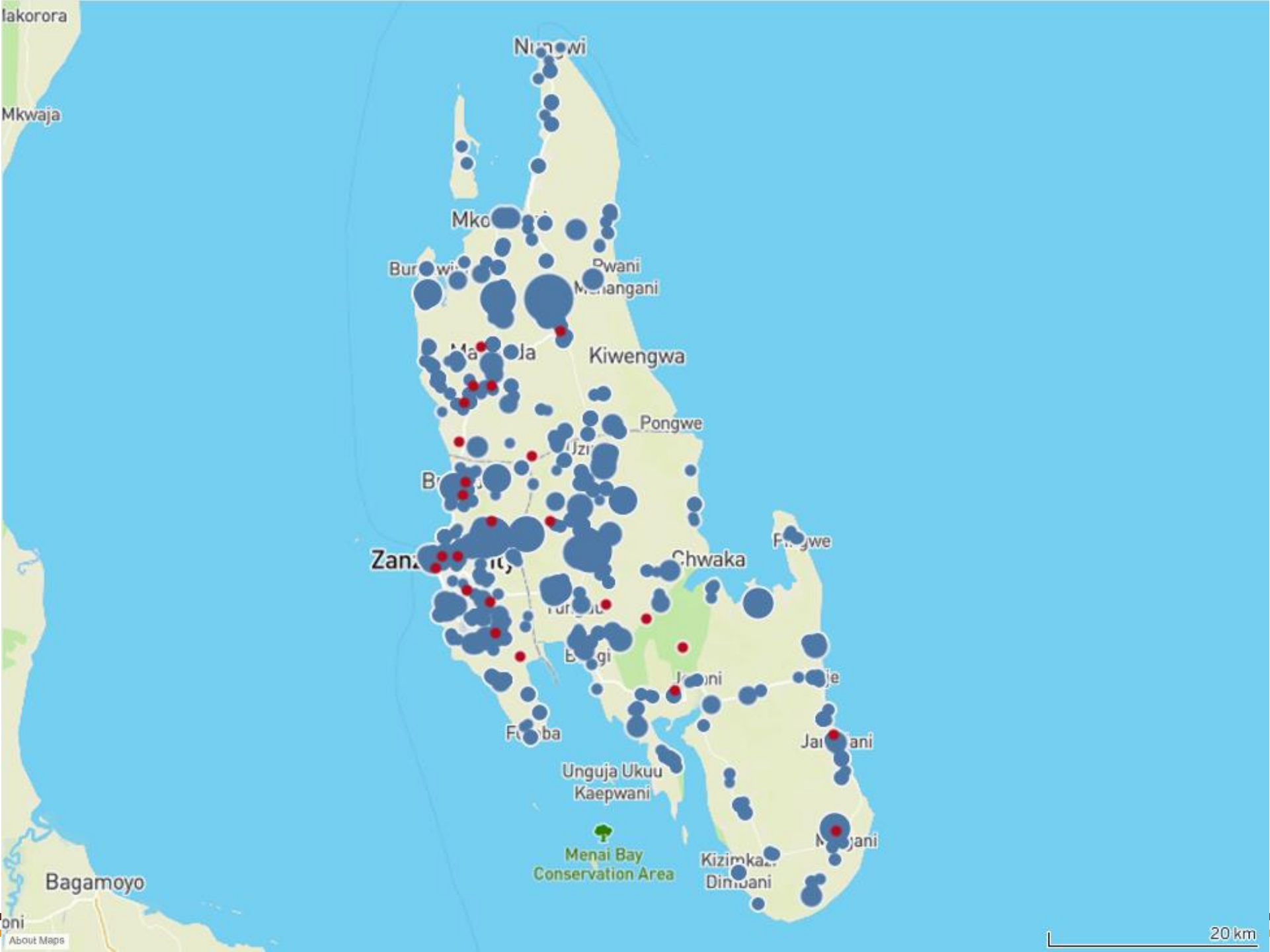


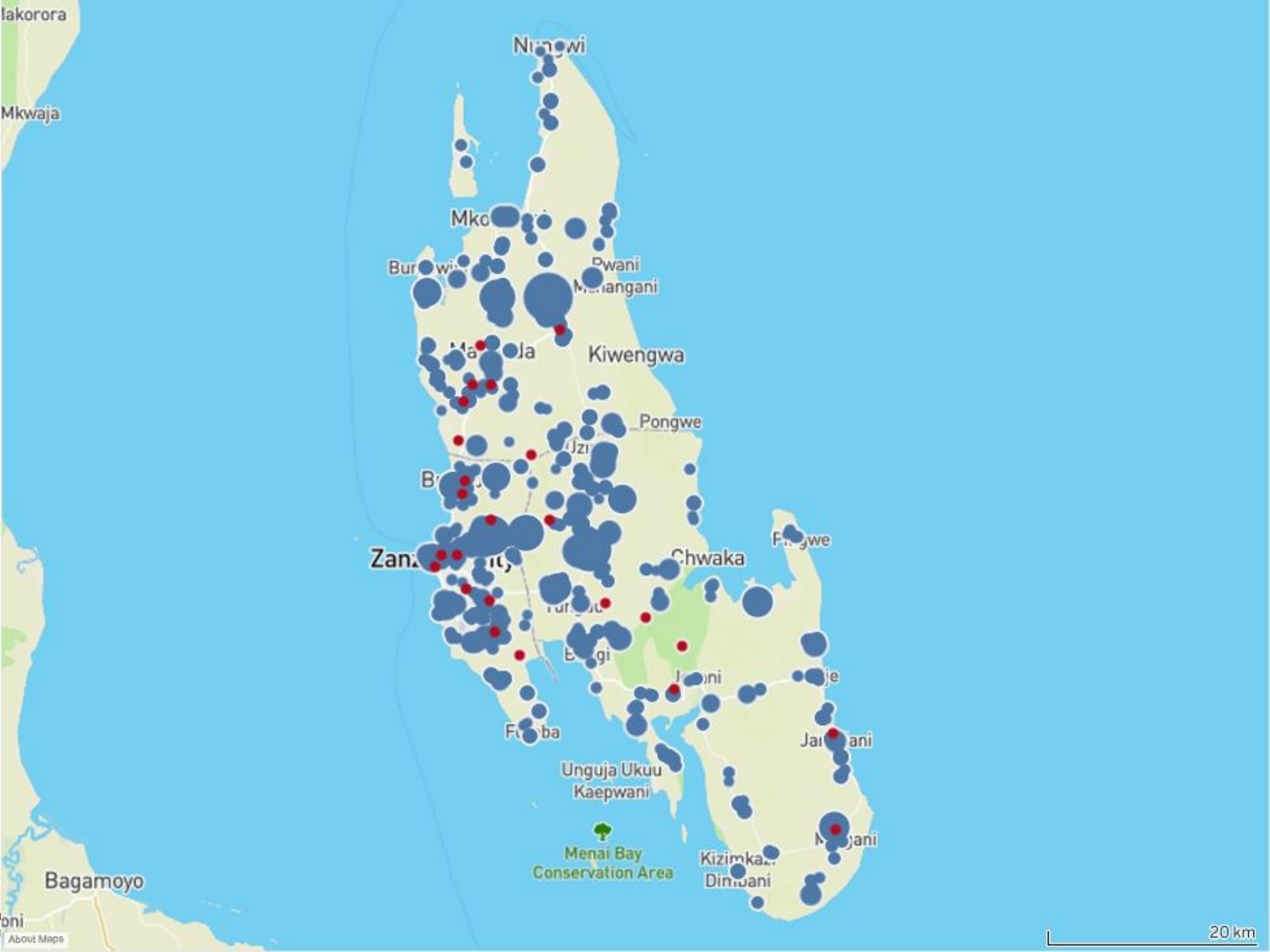


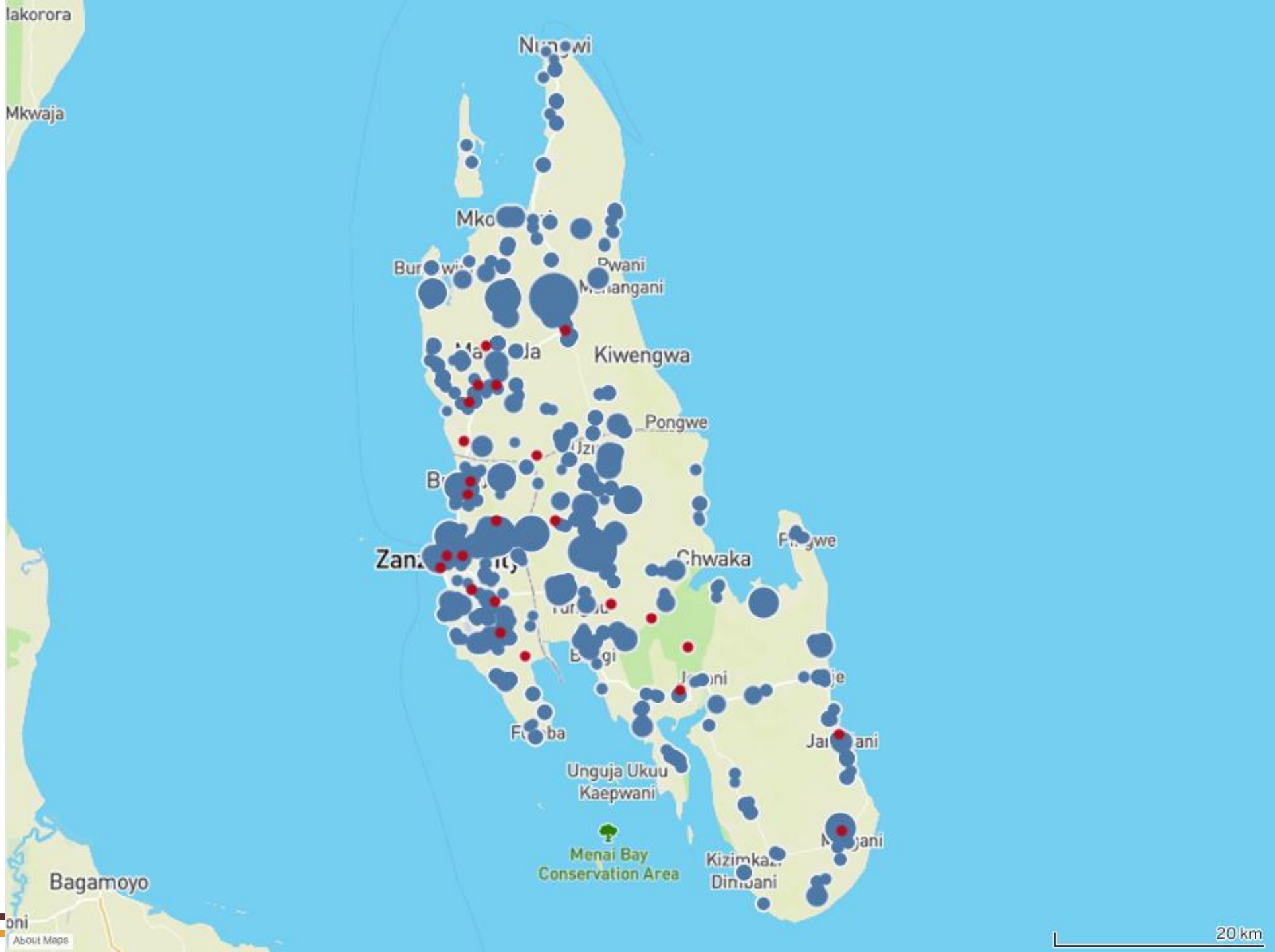


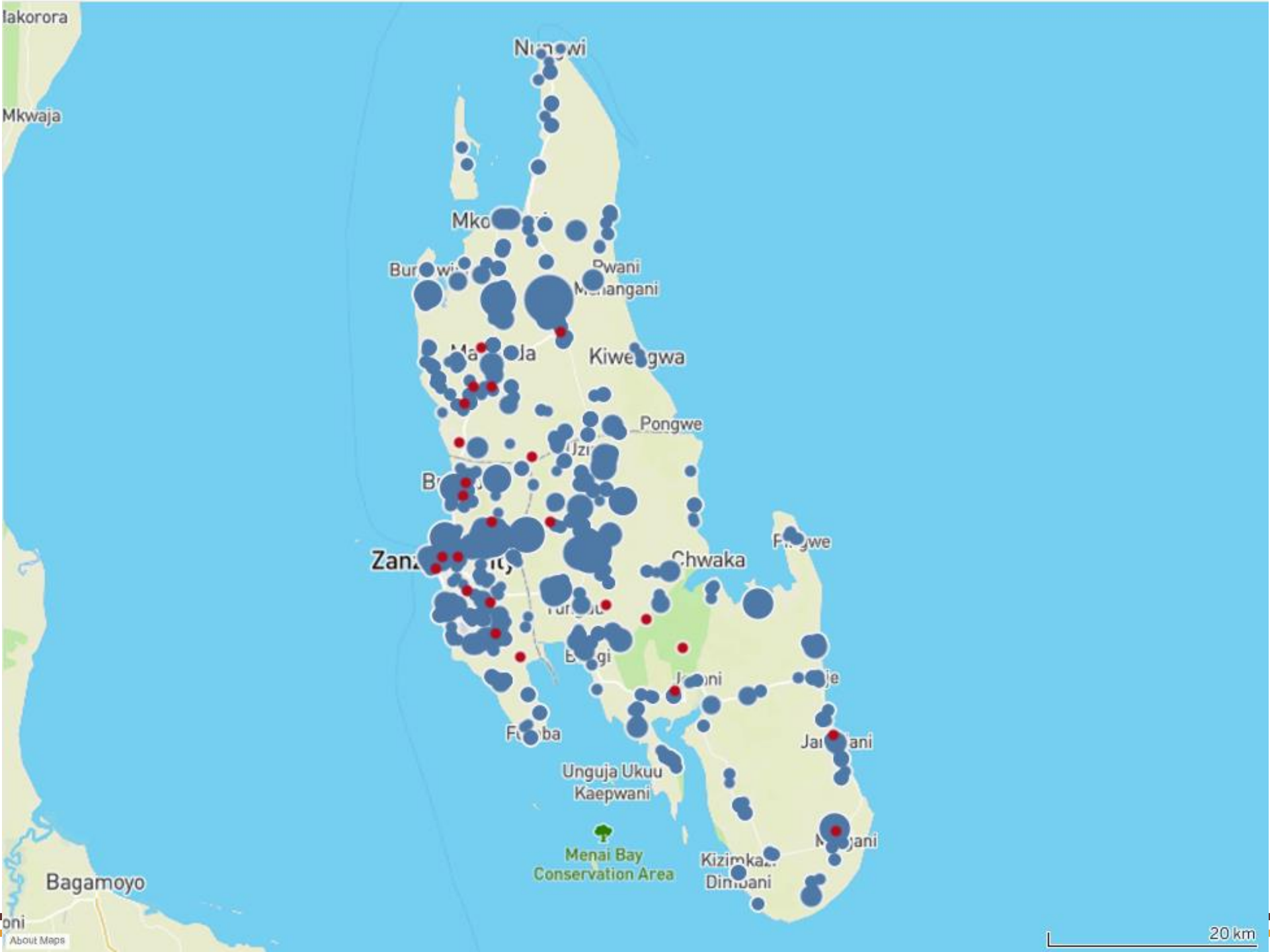




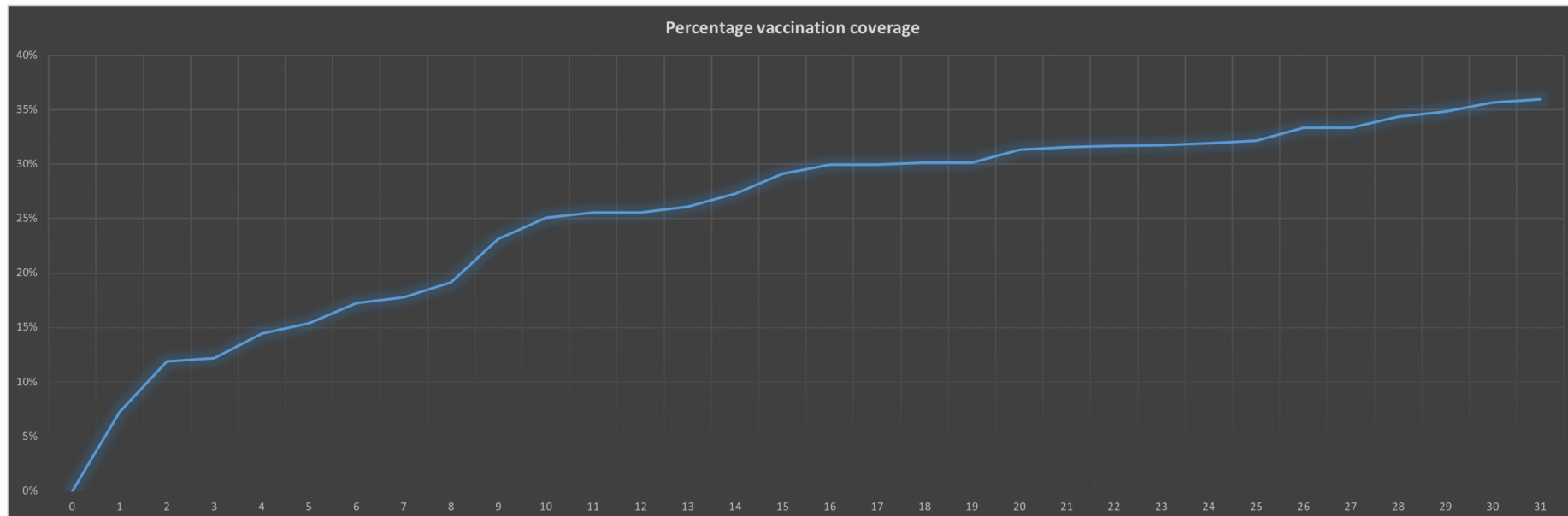
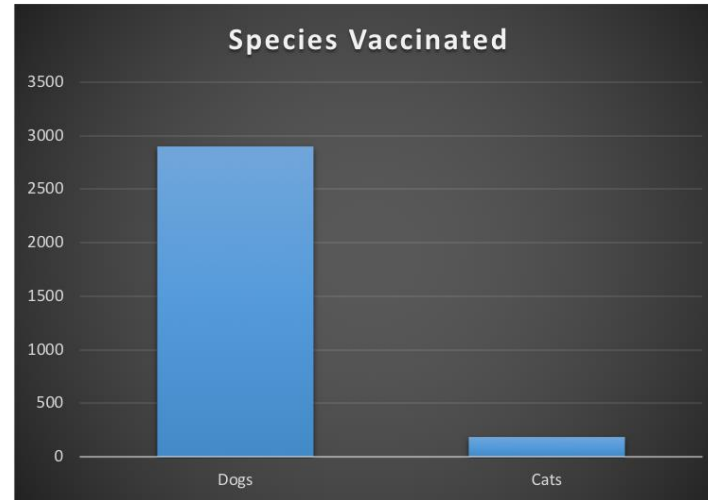








Zanzibar island

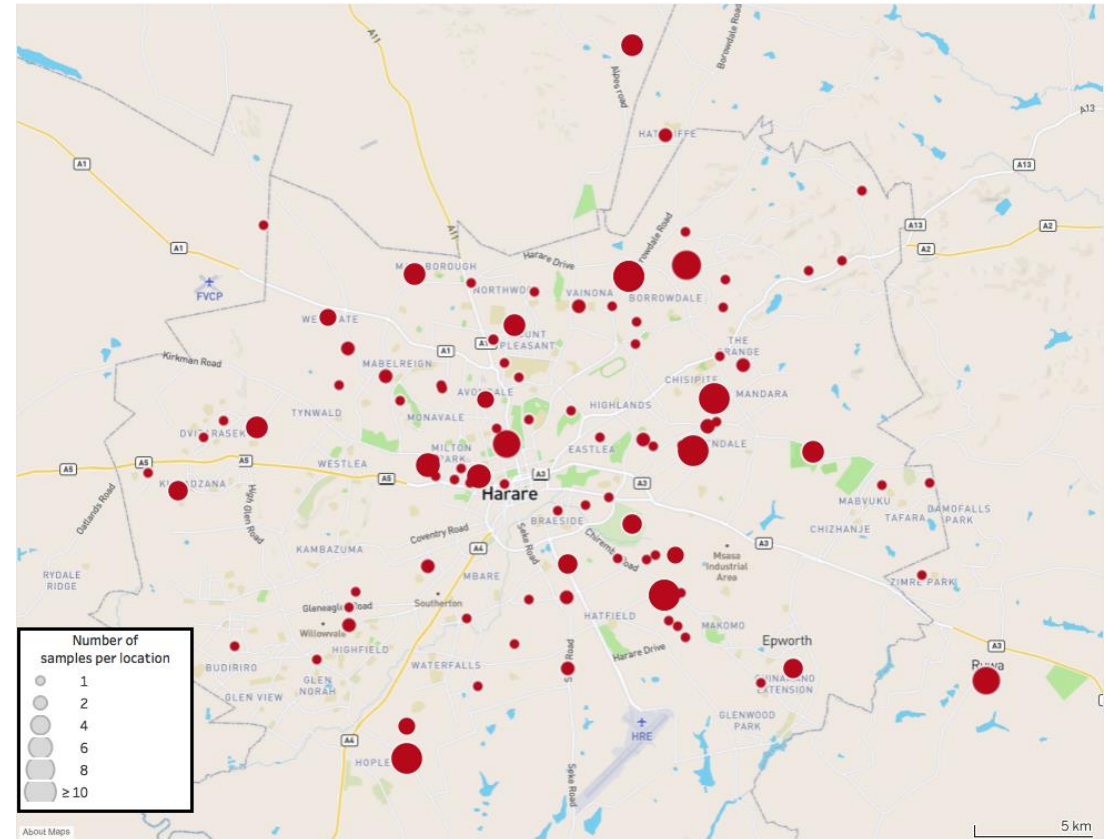


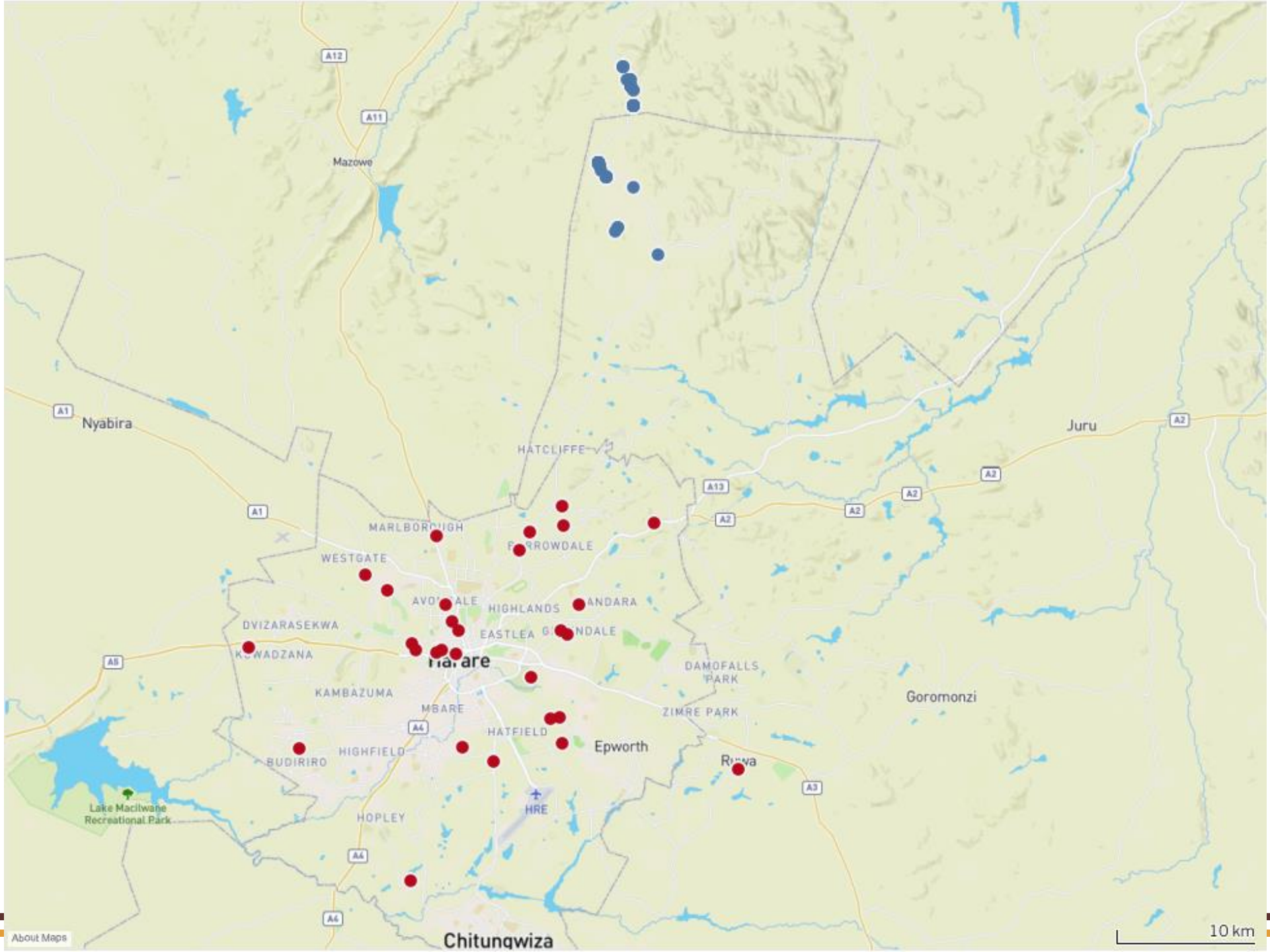
GDL usage

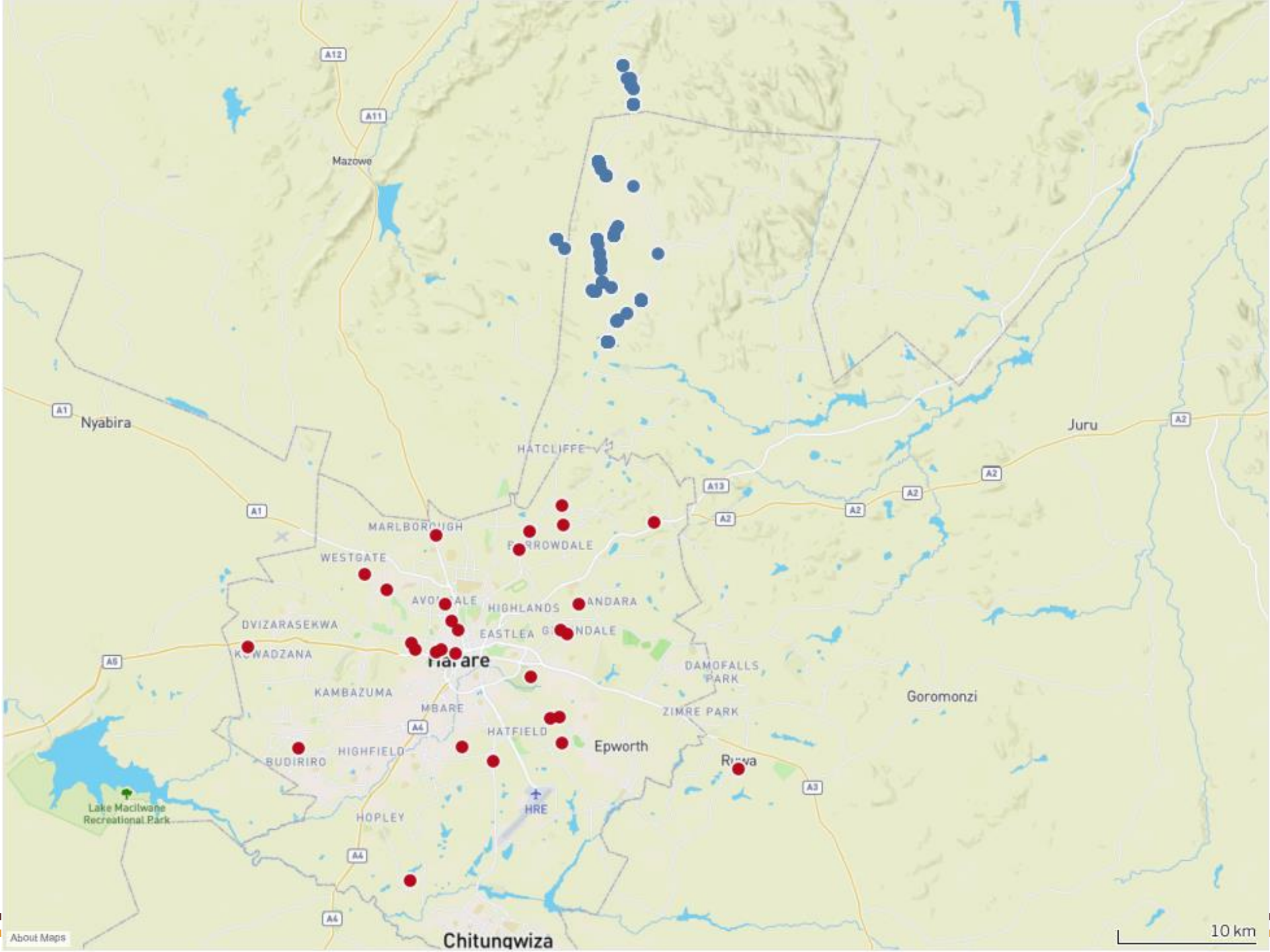
Zimbabwe – Strategic dog vaccination

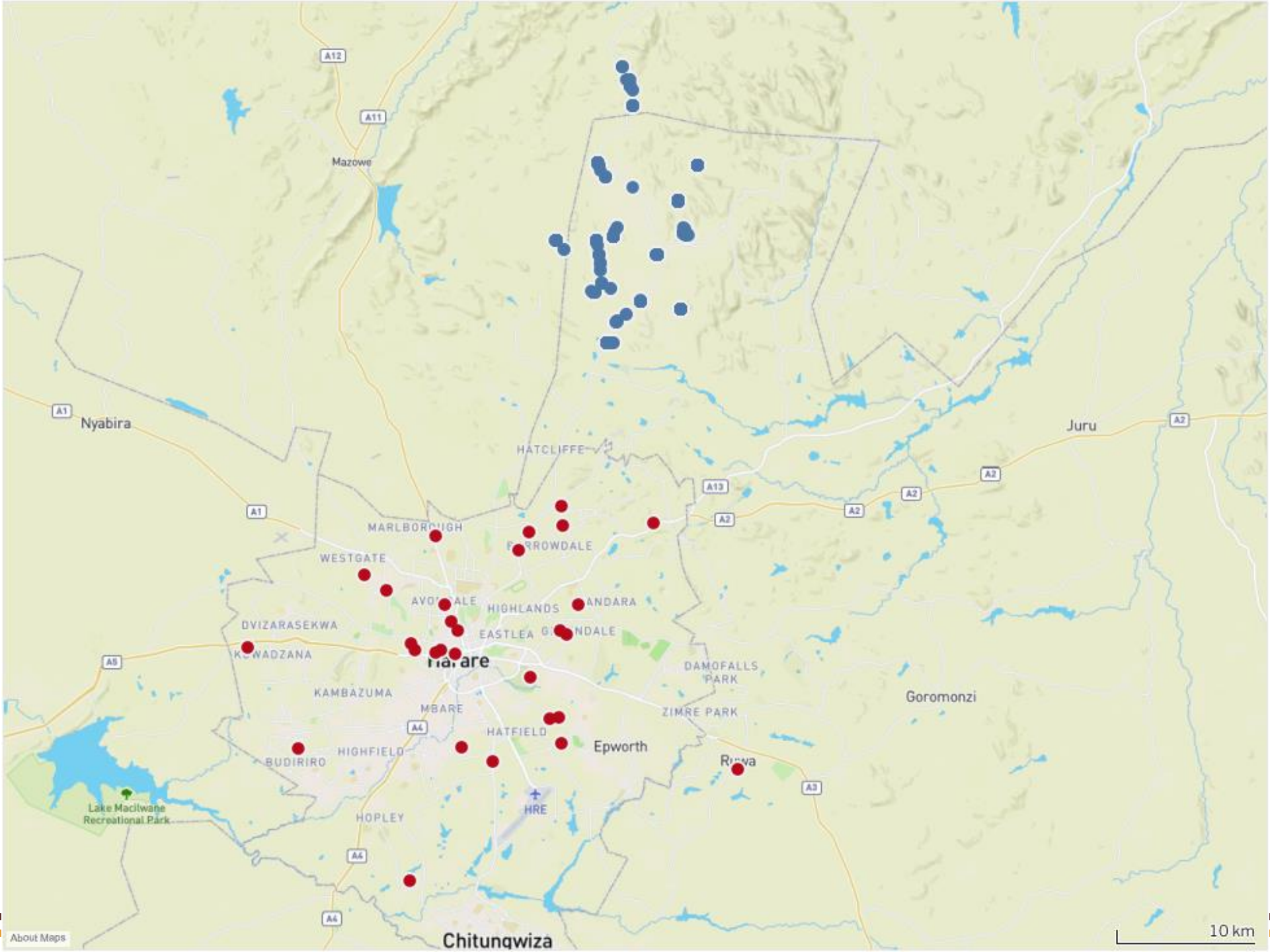
Harare, Zimbabwe

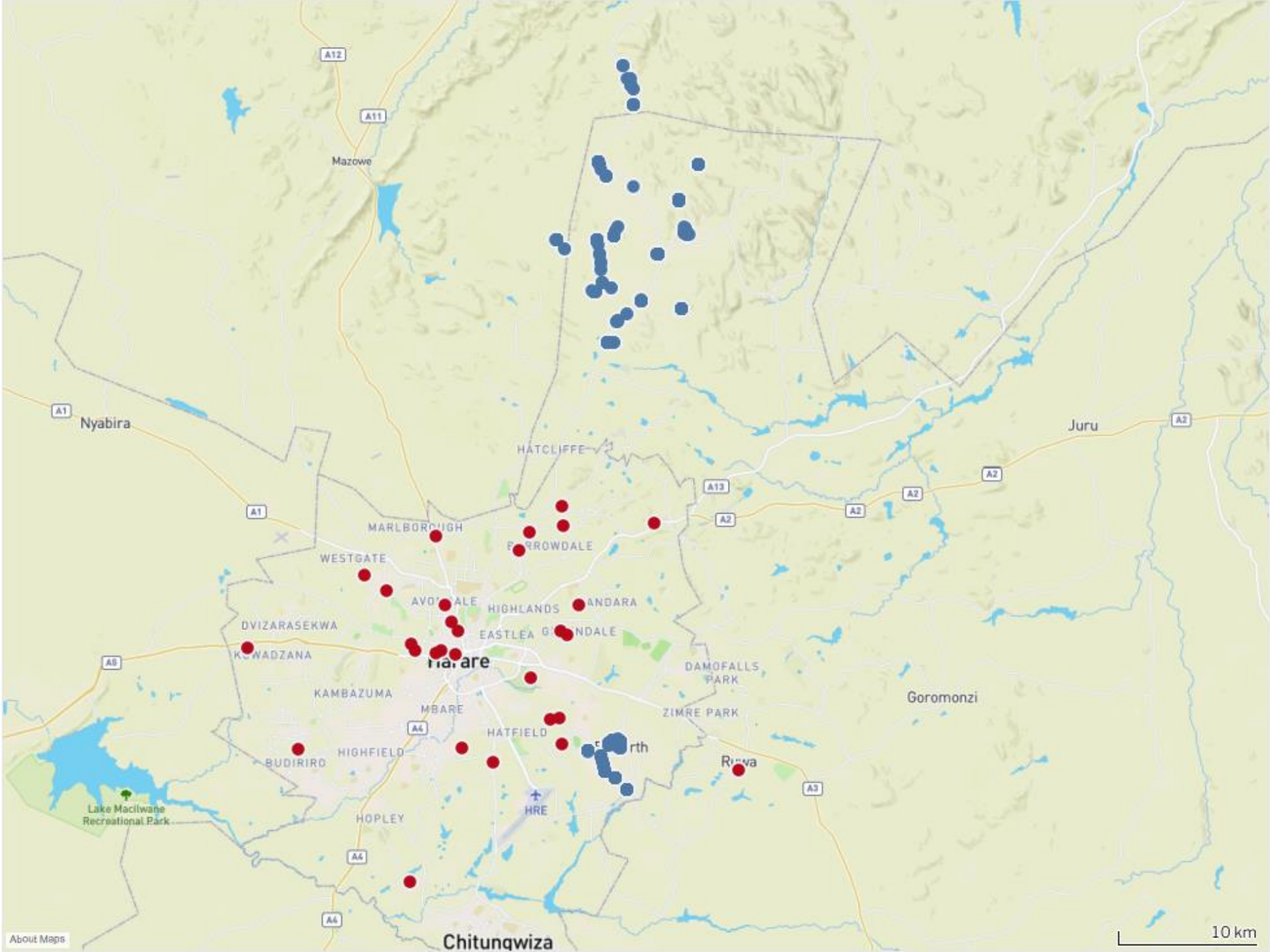
- Harare is the capital city of Zimbabwe
- City is a large urban metropolitan city
- Experiencing a severe outbreak of rabies since 2010

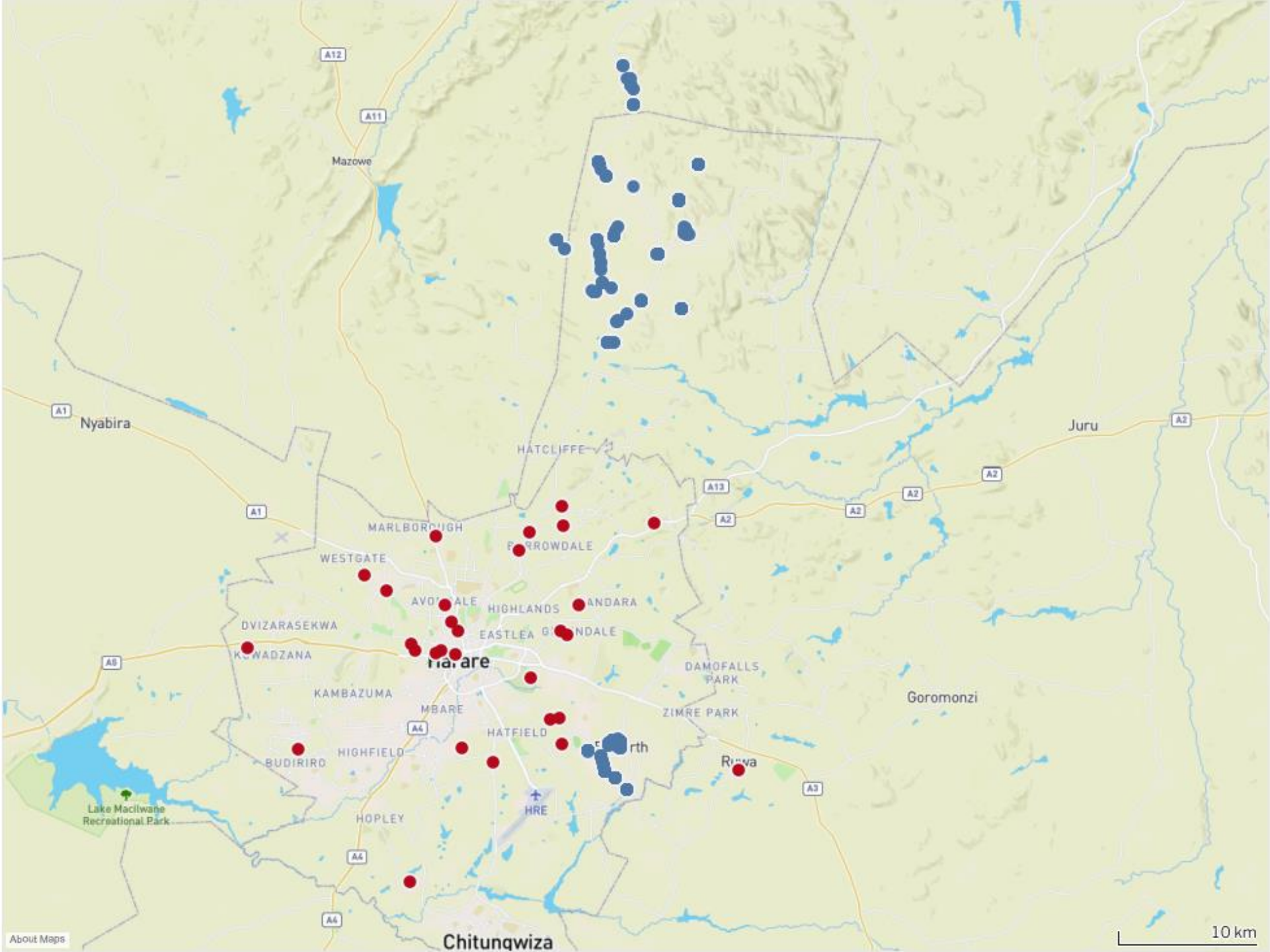


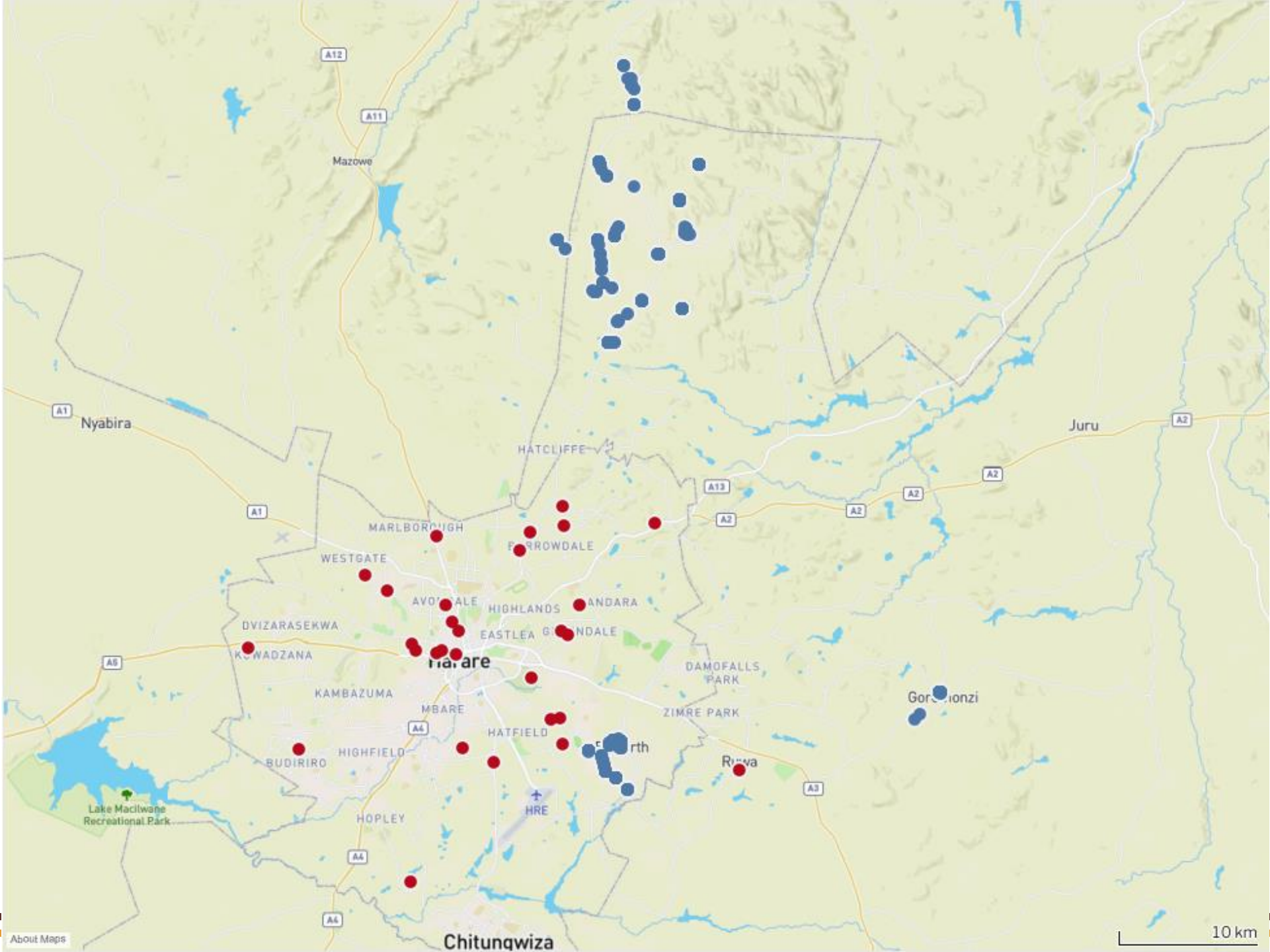


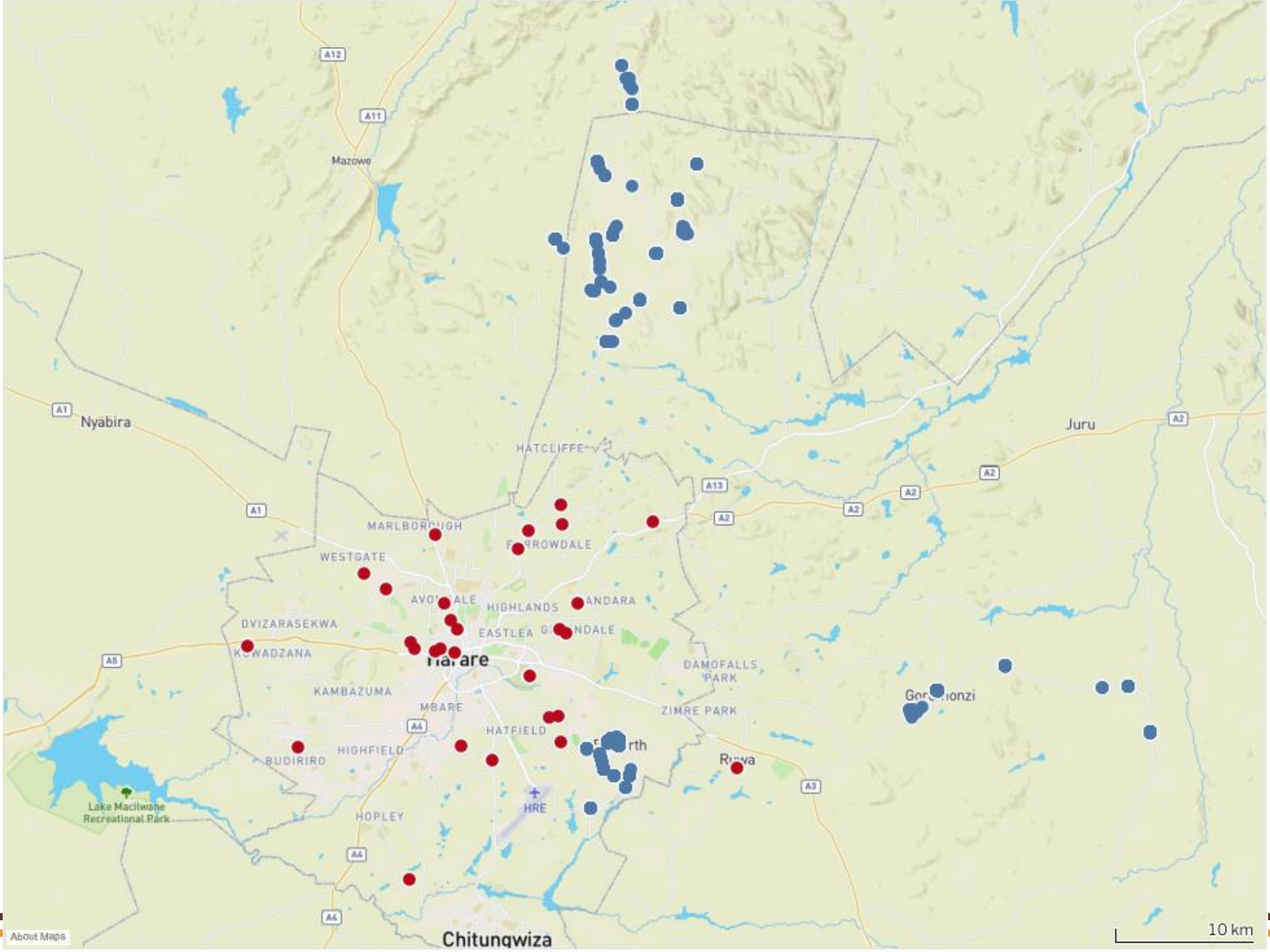


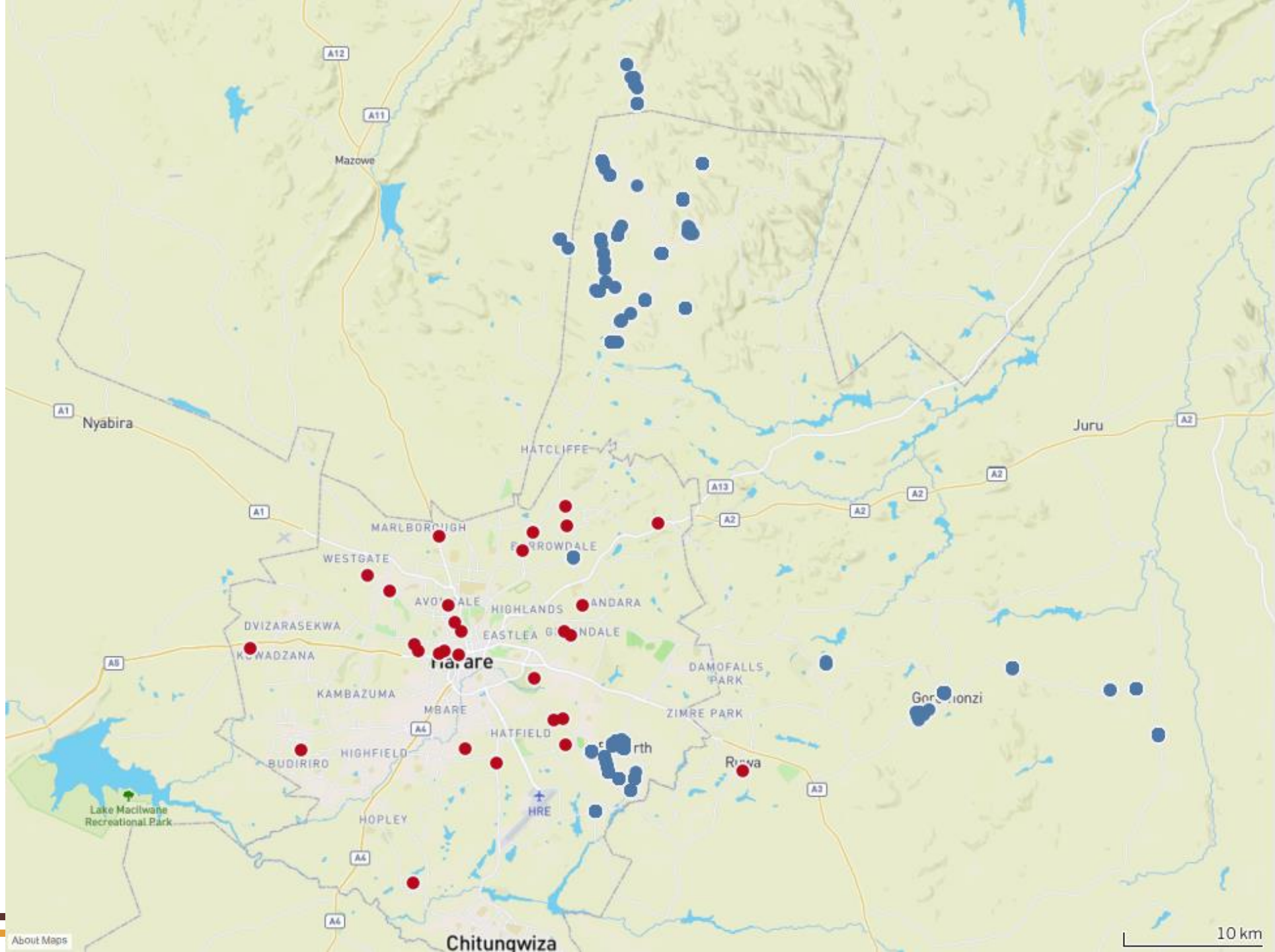


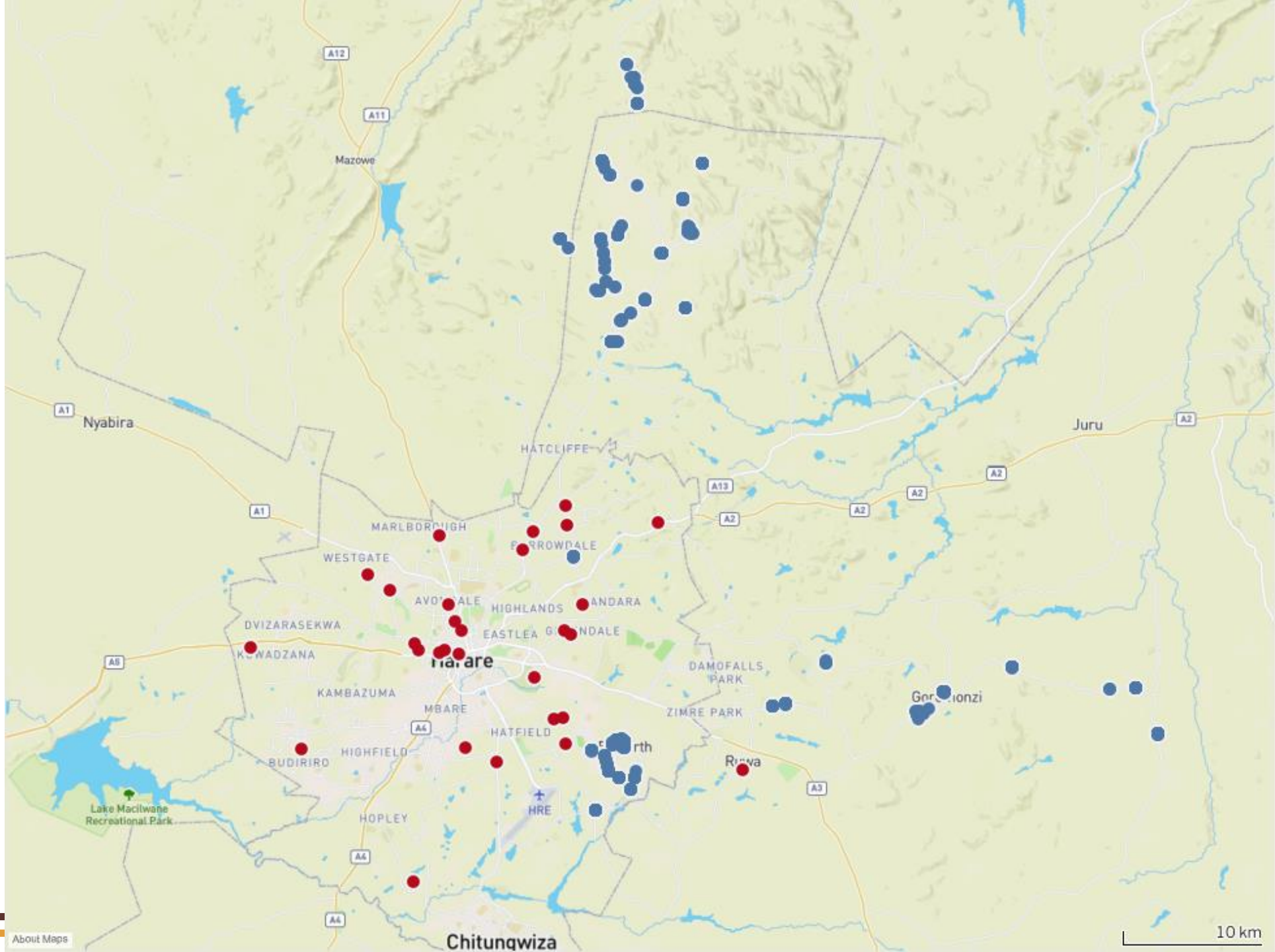


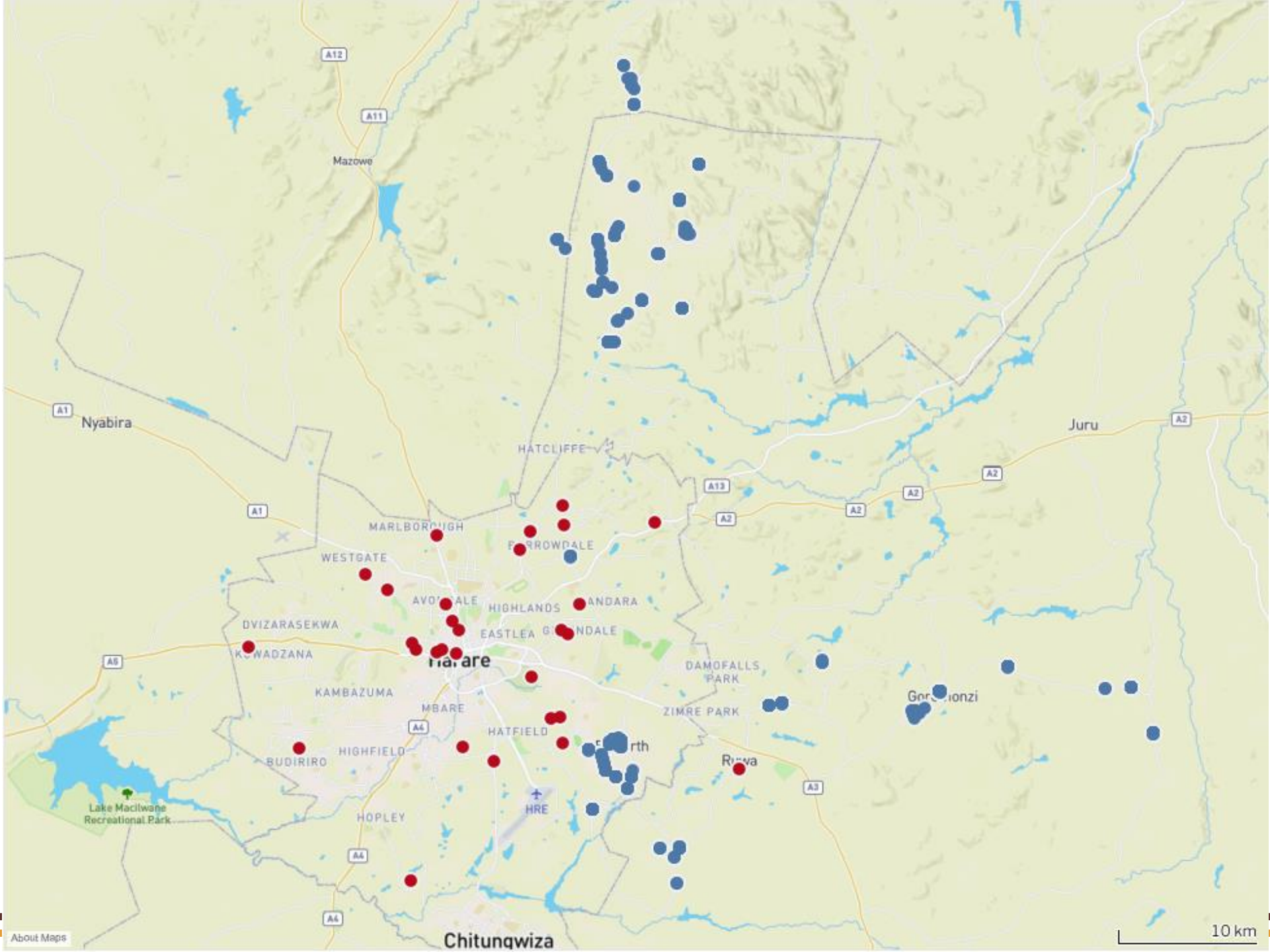


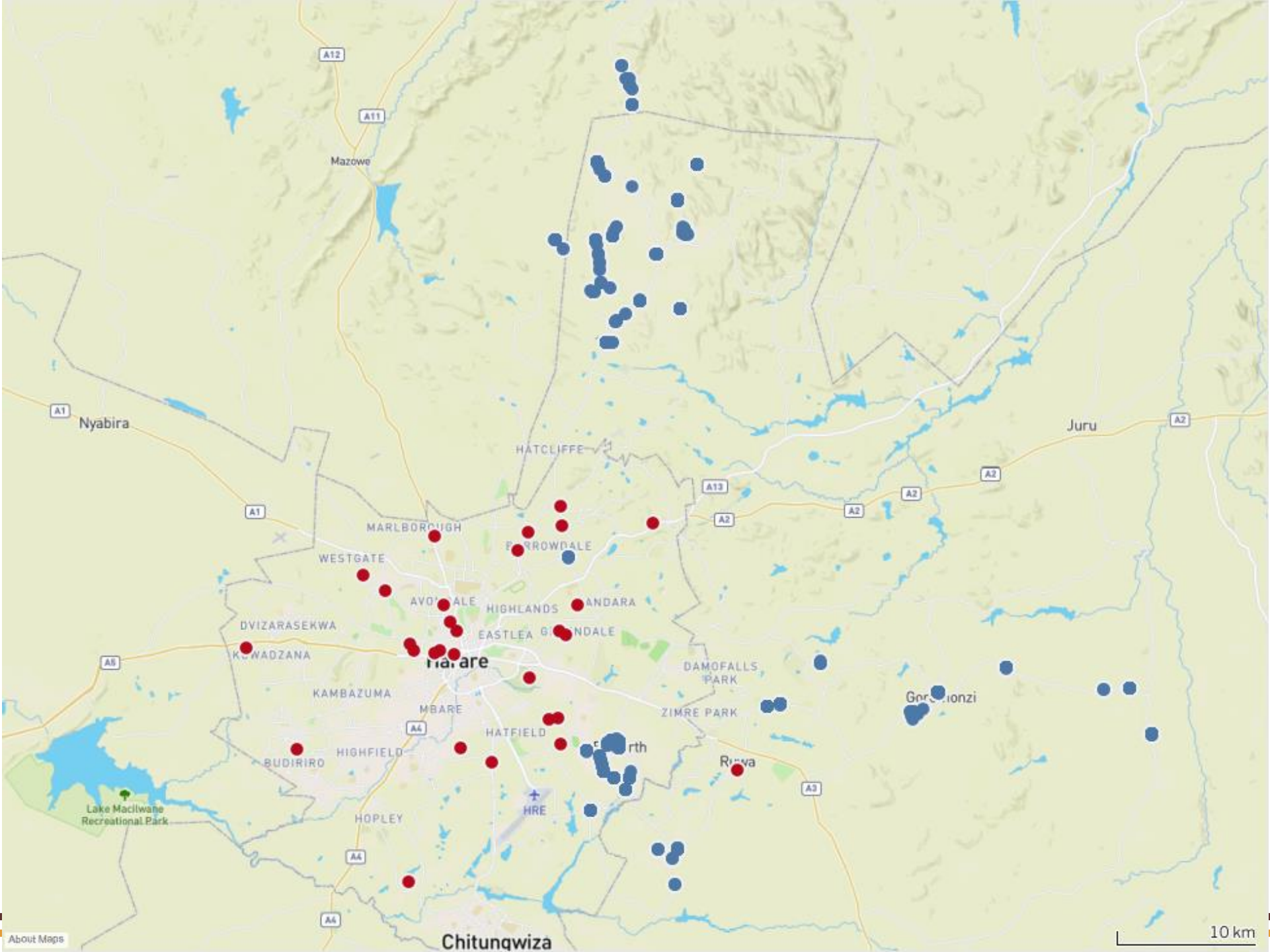


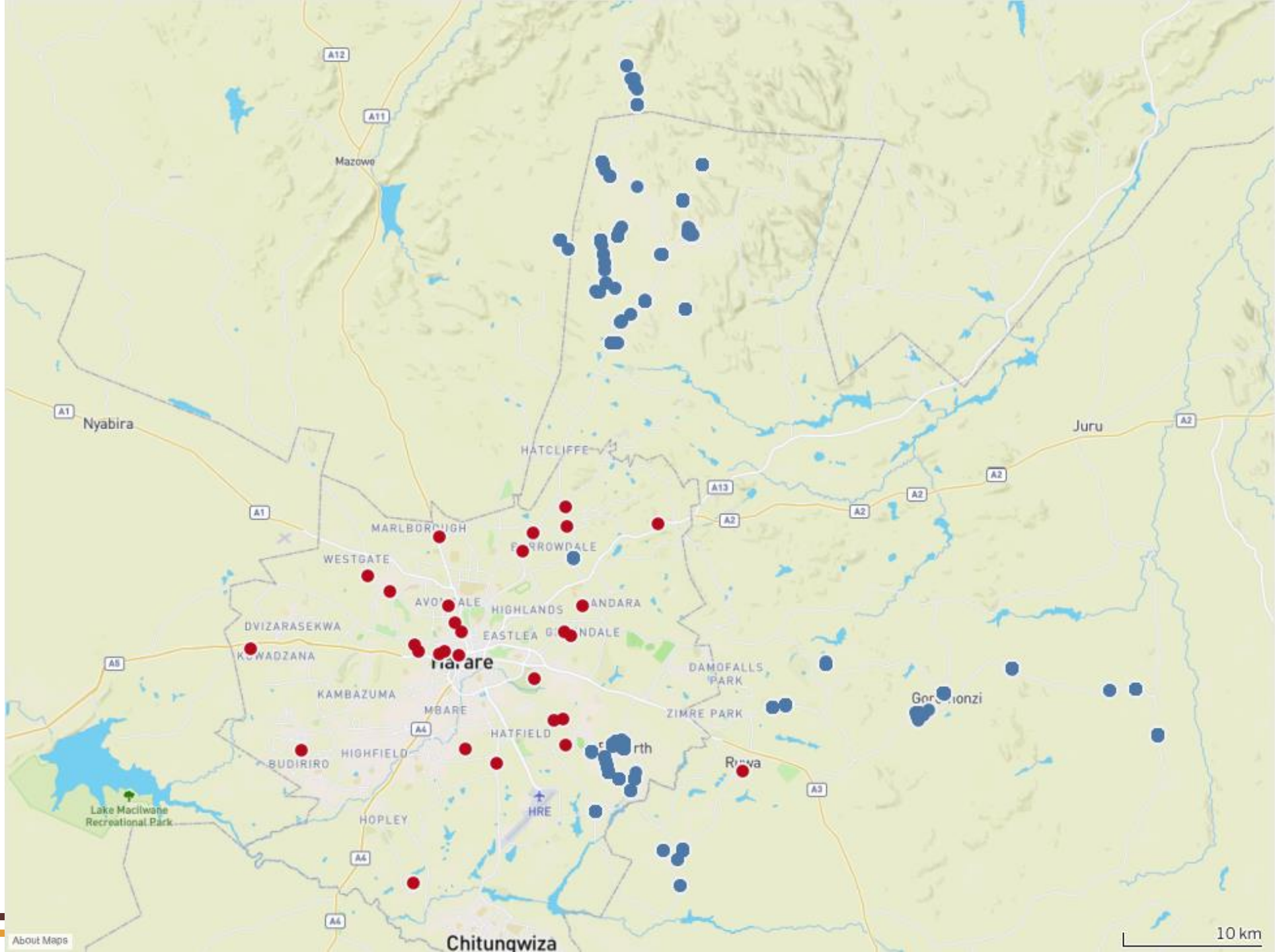


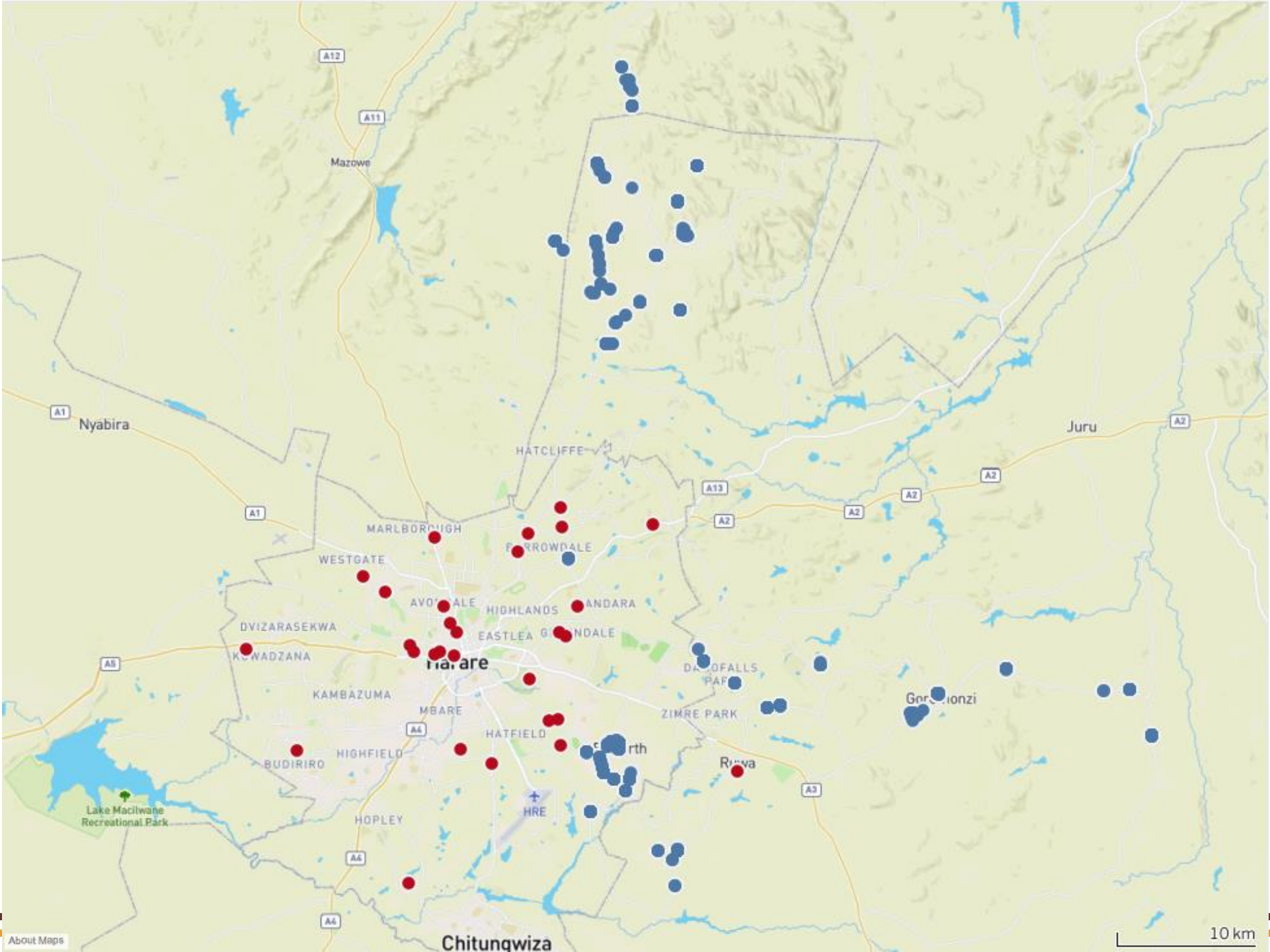


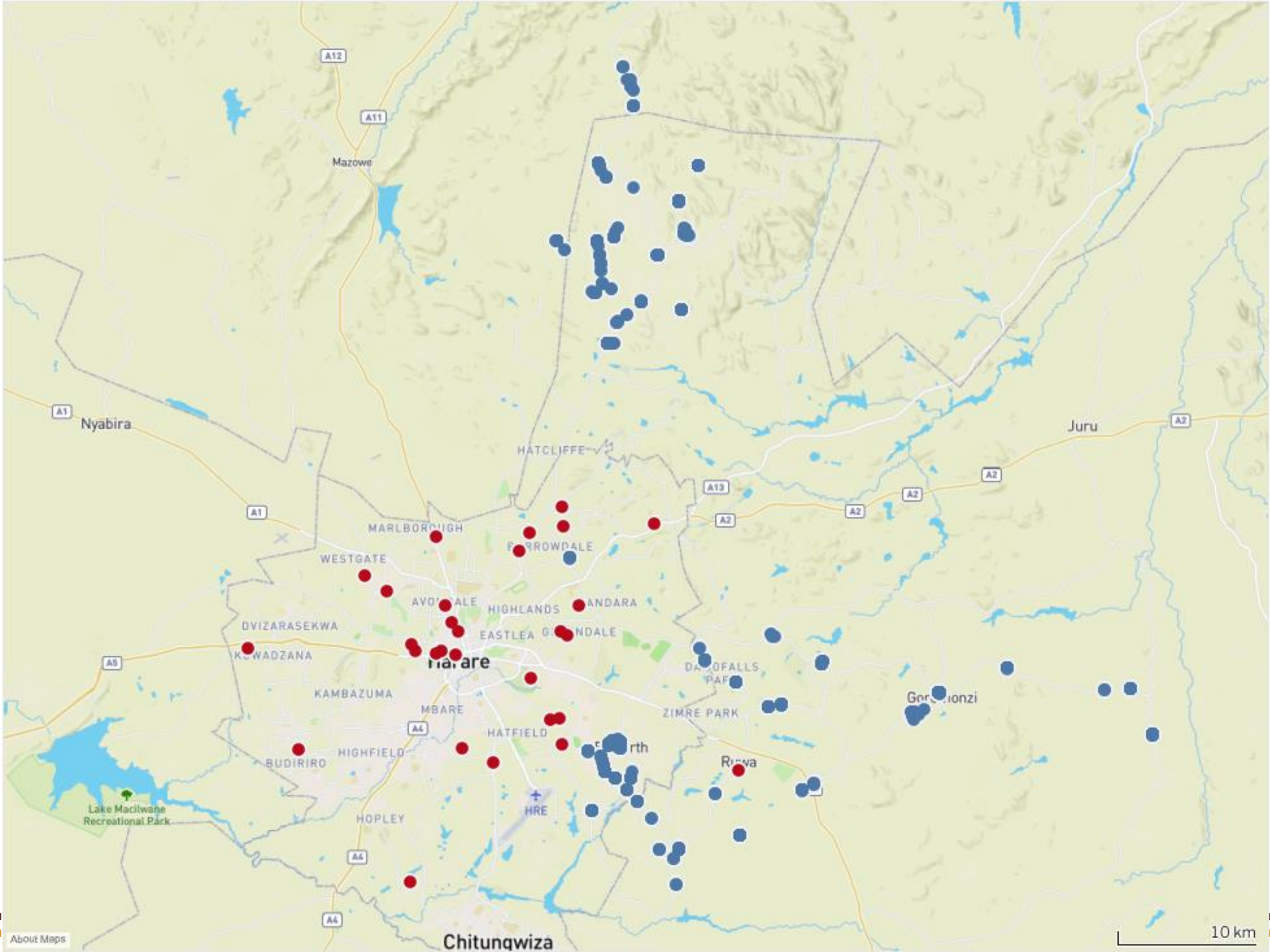


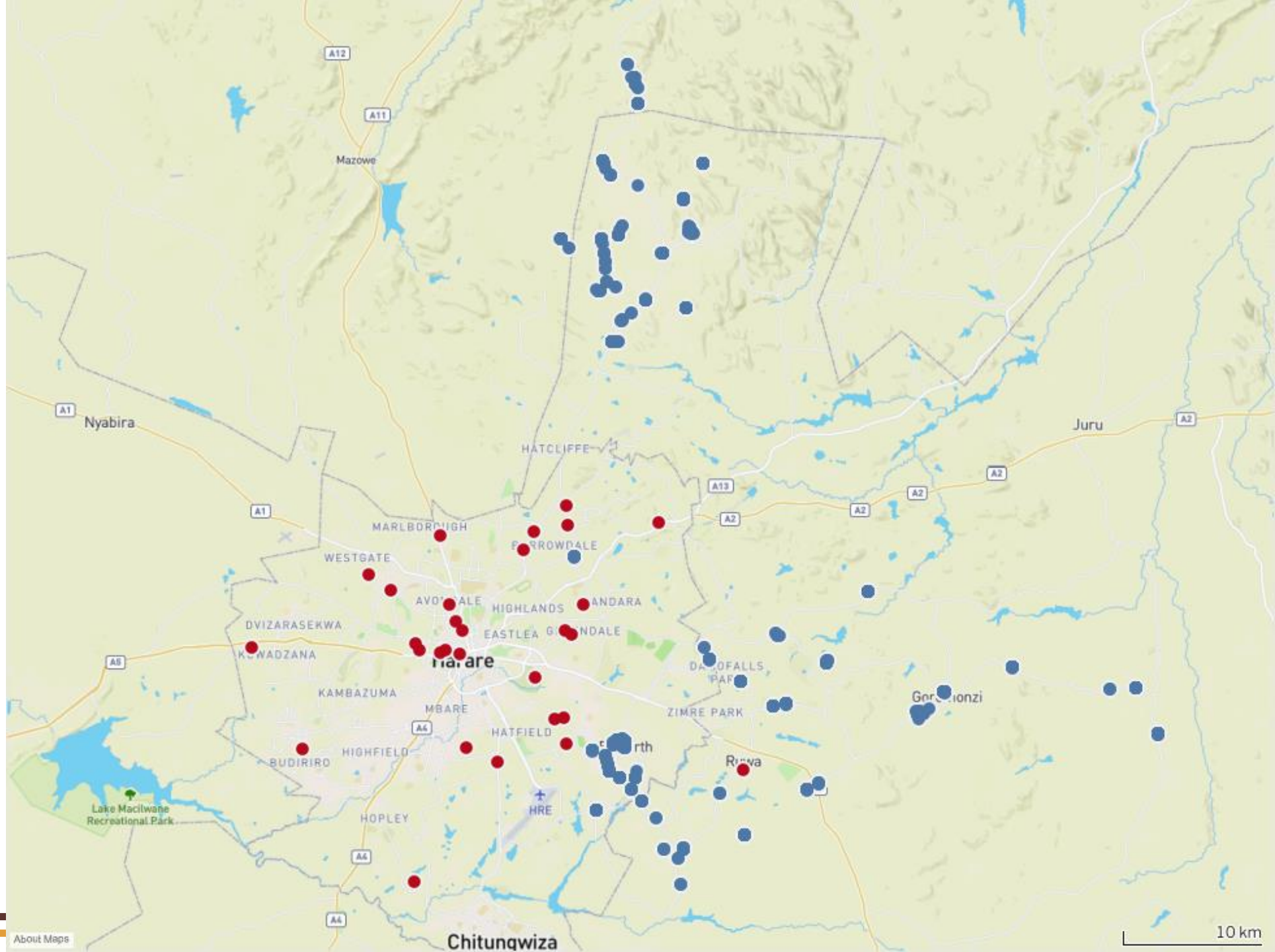


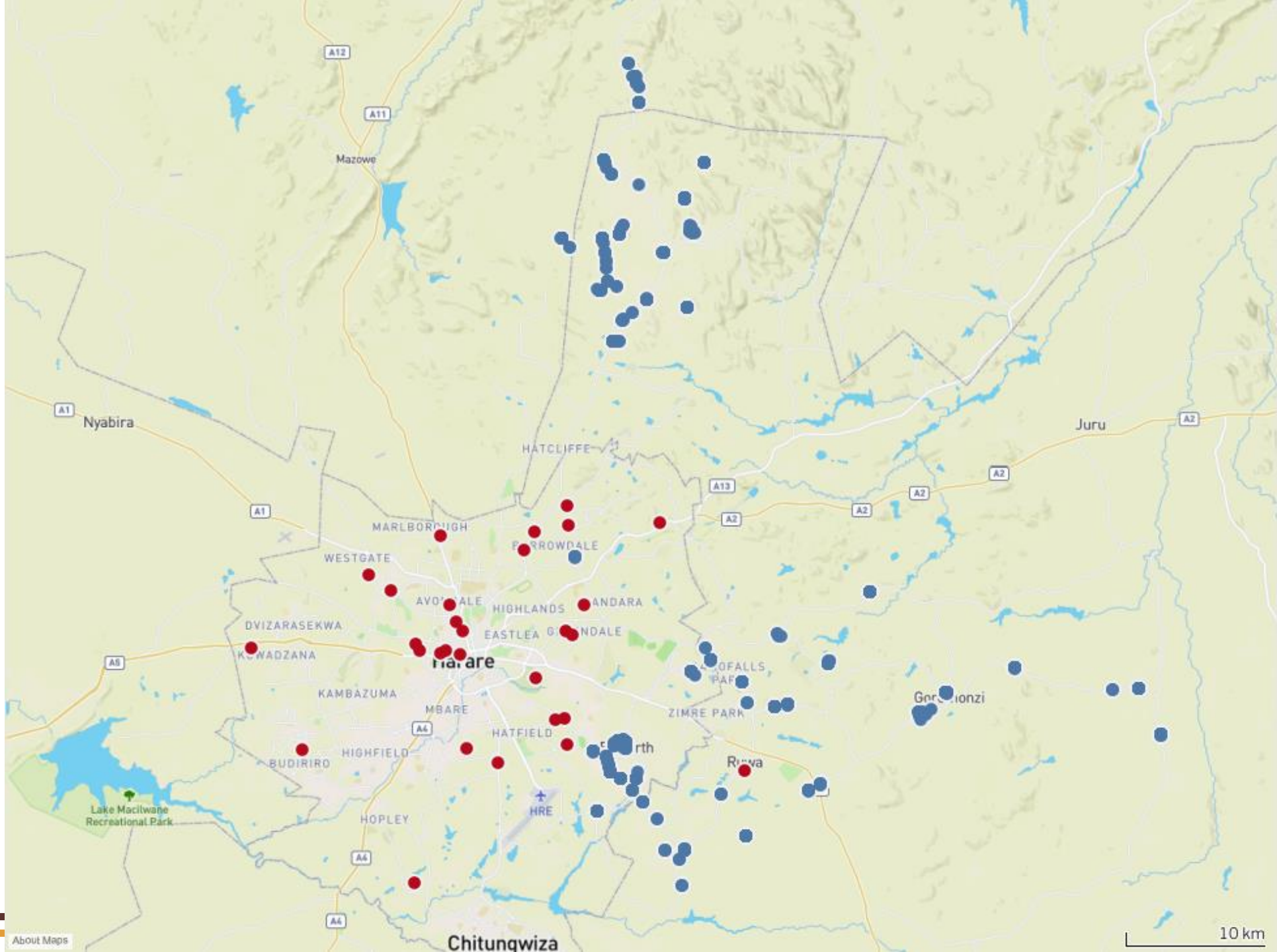


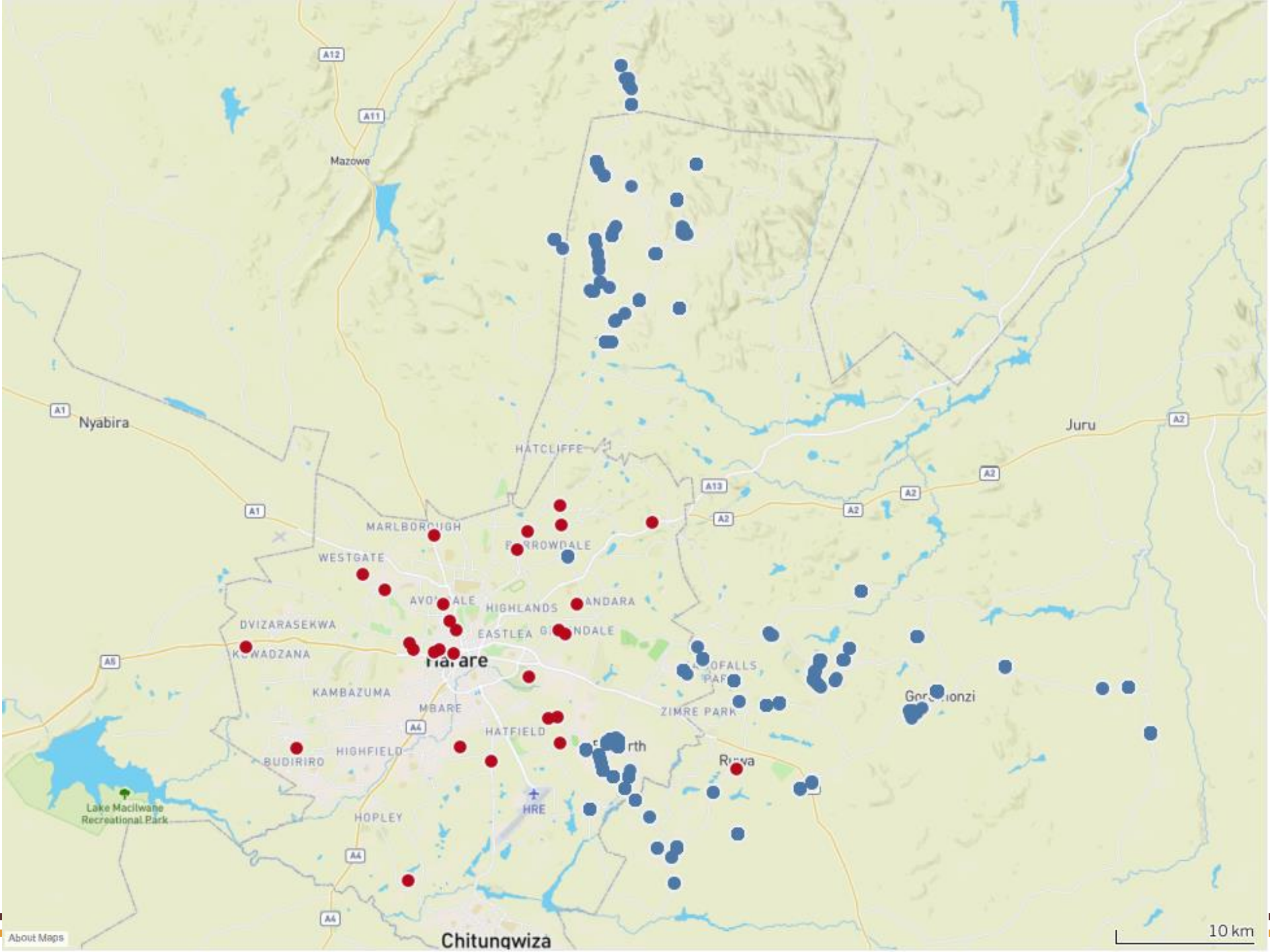


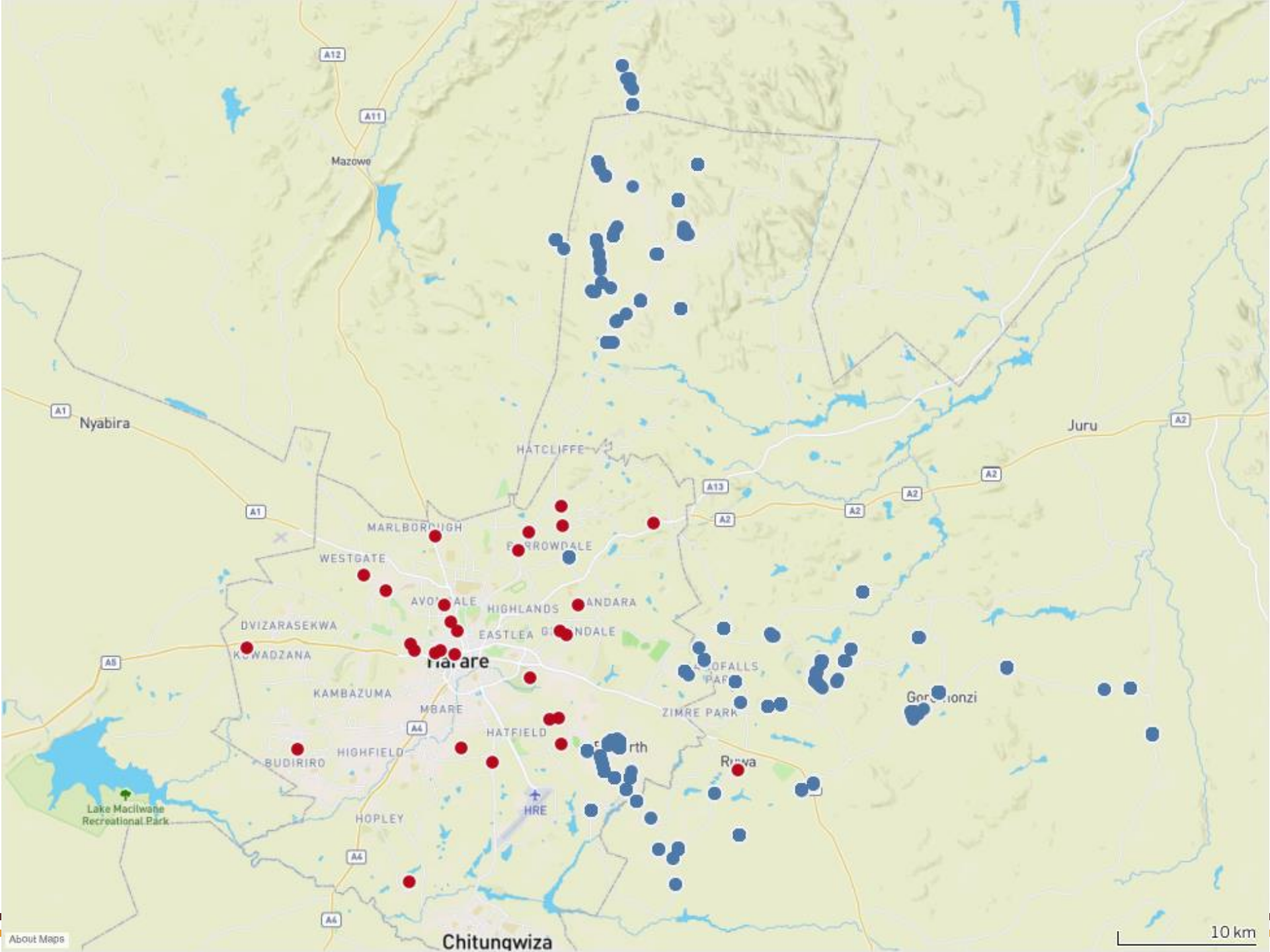




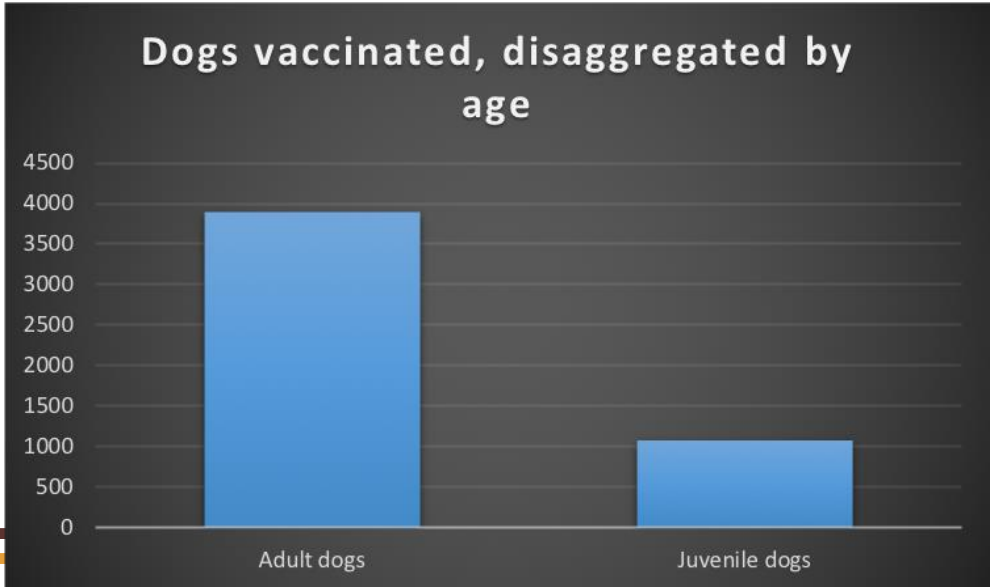
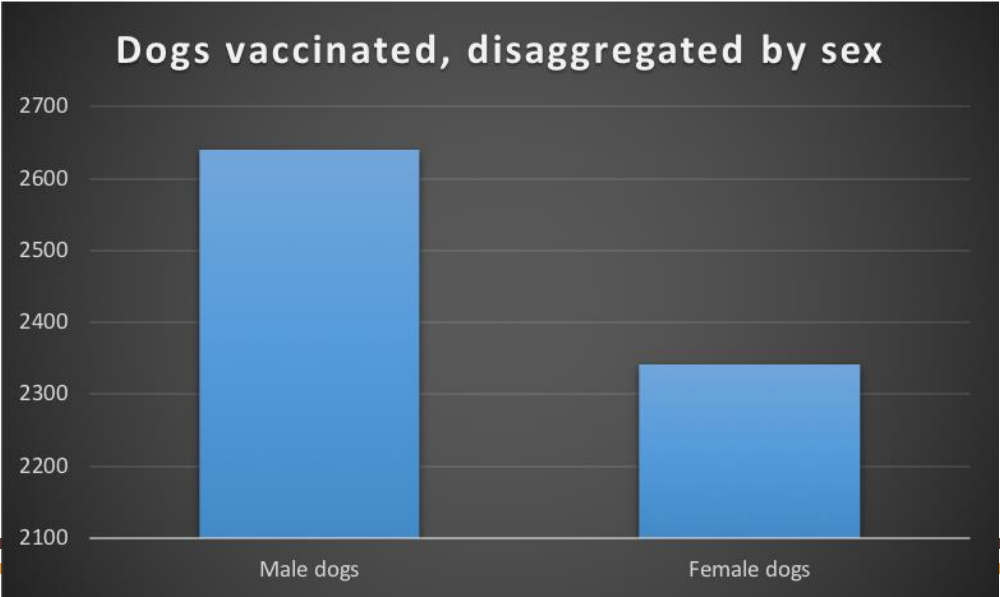
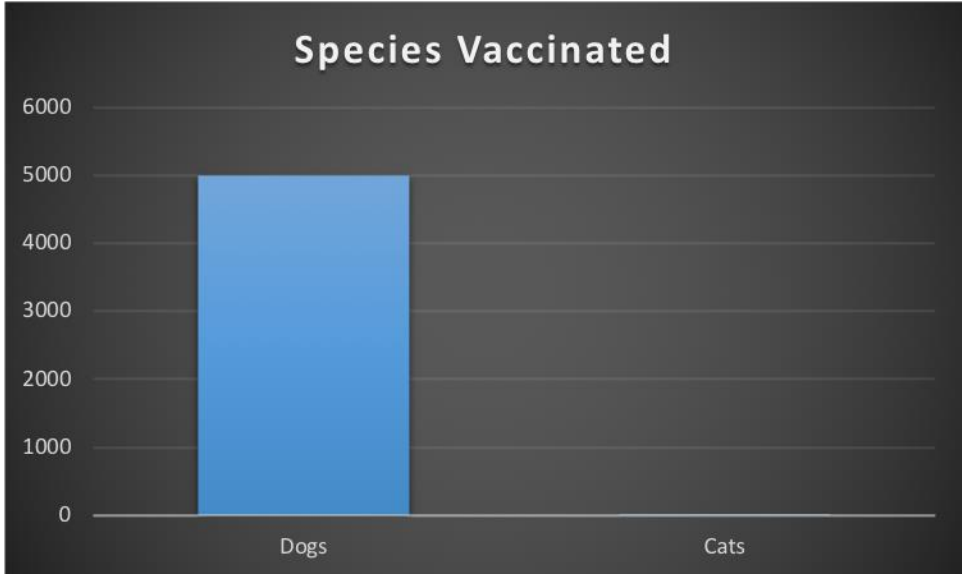








Harare, Zimbabwe



Versatility of the GDL devices

Versatility

- Decal design is interchangeable
- Software programme enables functional interchangeability
- Can be used in any situation
 - Limited to 3 questions with 2 options per question

Possible uses

- Rabies vaccination campaigns
- Post-vaccination surveys
- Sterilisation campaigns
- Basic KAP surveys
- Dog population estimates
- Healthcare facilities – wound category information
- Other diseases/other uses non-rabies related

THANK YOU



www.rabiesalliance.org