

Technical workshop on geospatial population
estimation for selected countries in the Arab
Region

Introduction to gridded population data

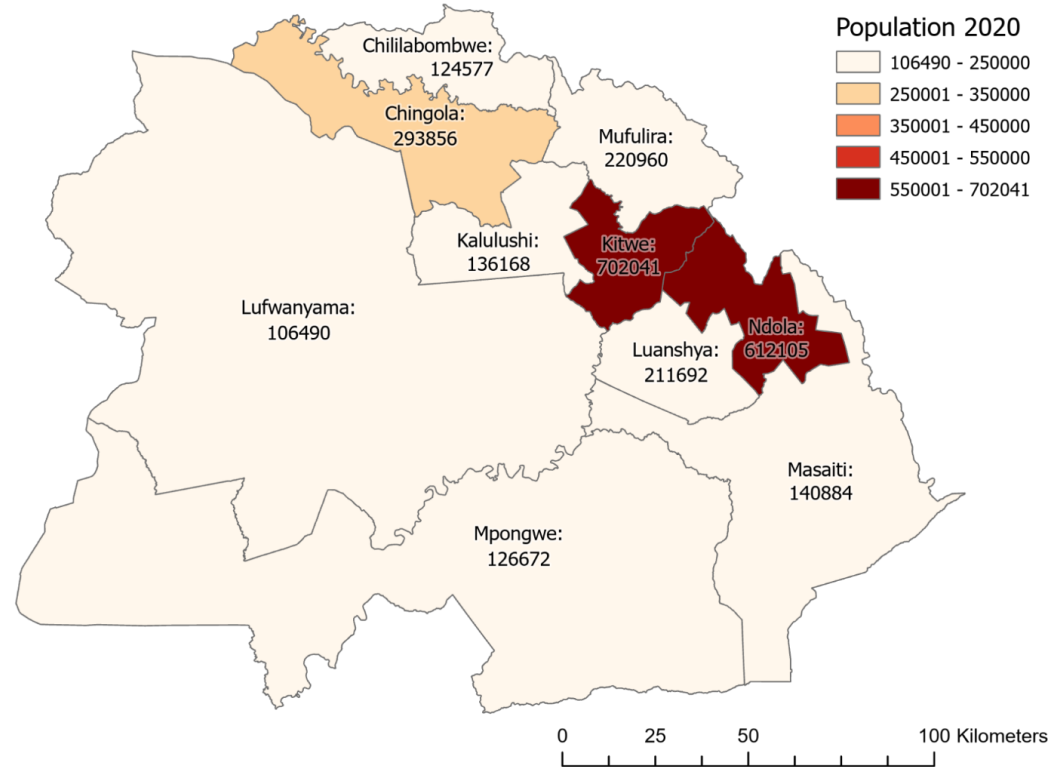
WorldPop

Population estimates

| District | Province | Total |
|-----------------|-----------------|--------------|
| Chililabombwe | Copperbelt | 124577 |
| Chingola | Copperbelt | 293856 |
| Kalulushi | Copperbelt | 136168 |
| Kitwe | Copperbelt | 702041 |
| Luanshya | Copperbelt | 211692 |
| Lufwanyama | Copperbelt | 106490 |
| Masaiti | Copperbelt | 140884 |
| Mpongwe | Copperbelt | 126672 |
| Mufulira | Copperbelt | 220960 |
| Ndola | Copperbelt | 612105 |

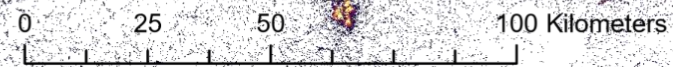
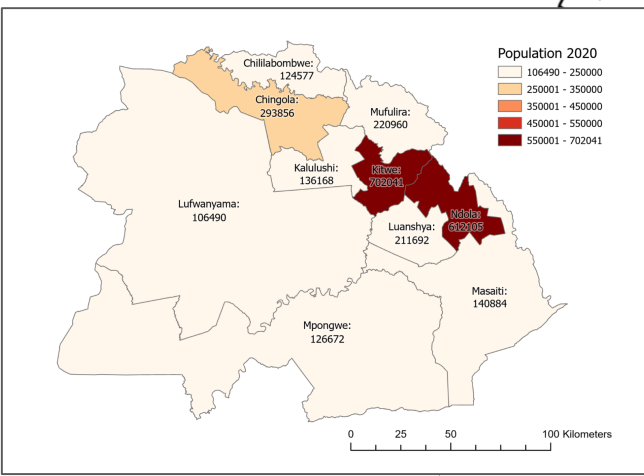
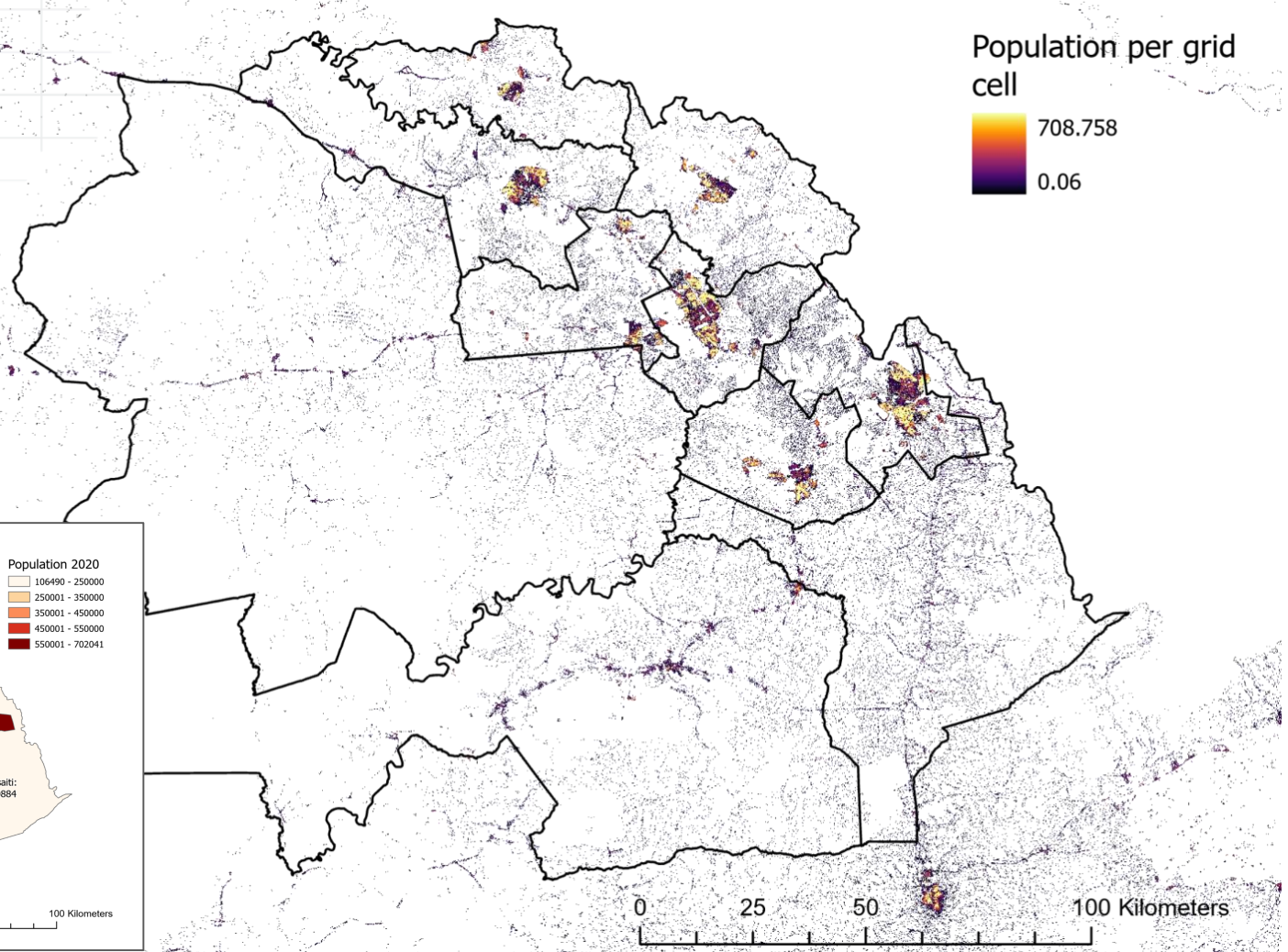
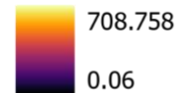
Population estimates

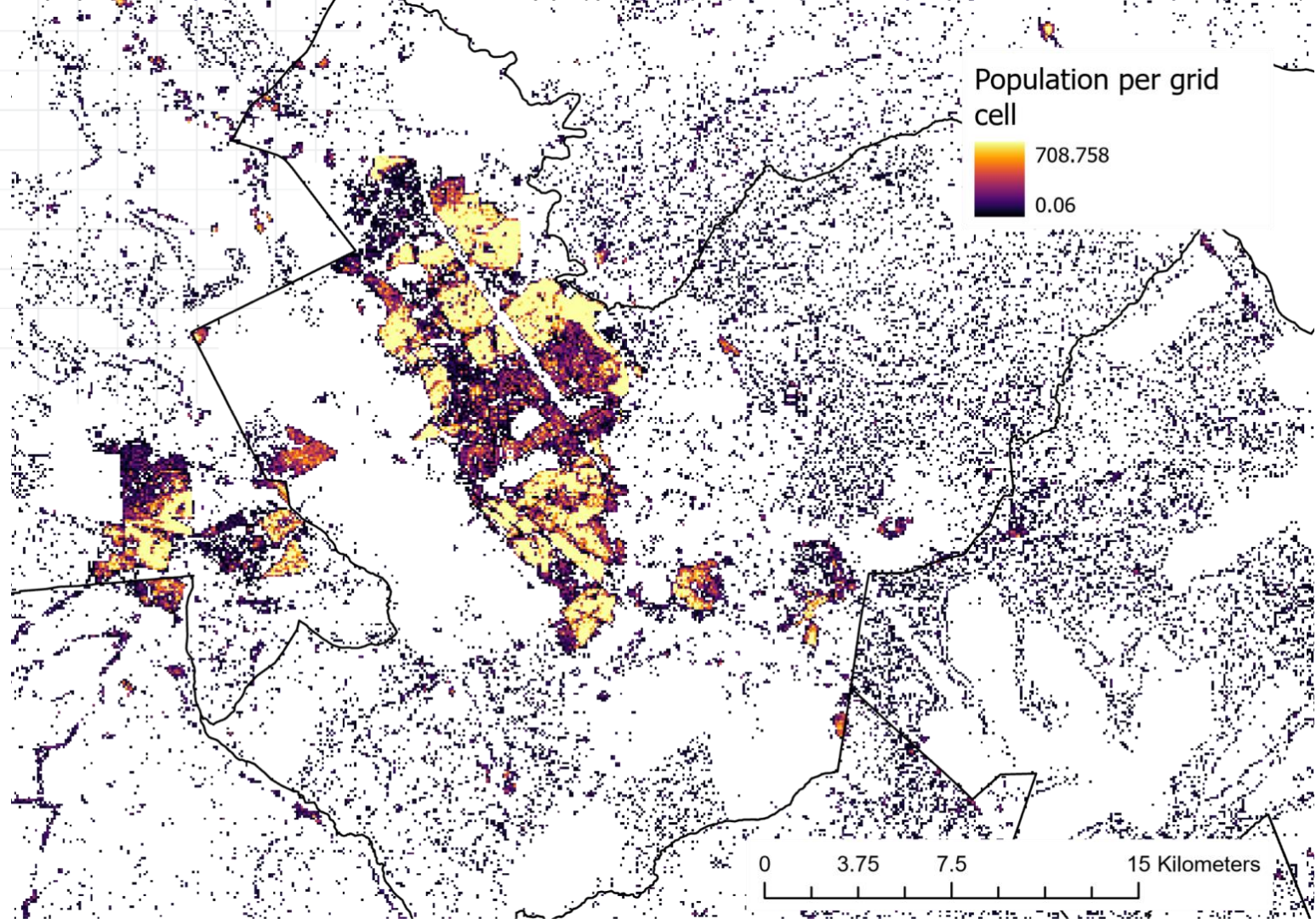
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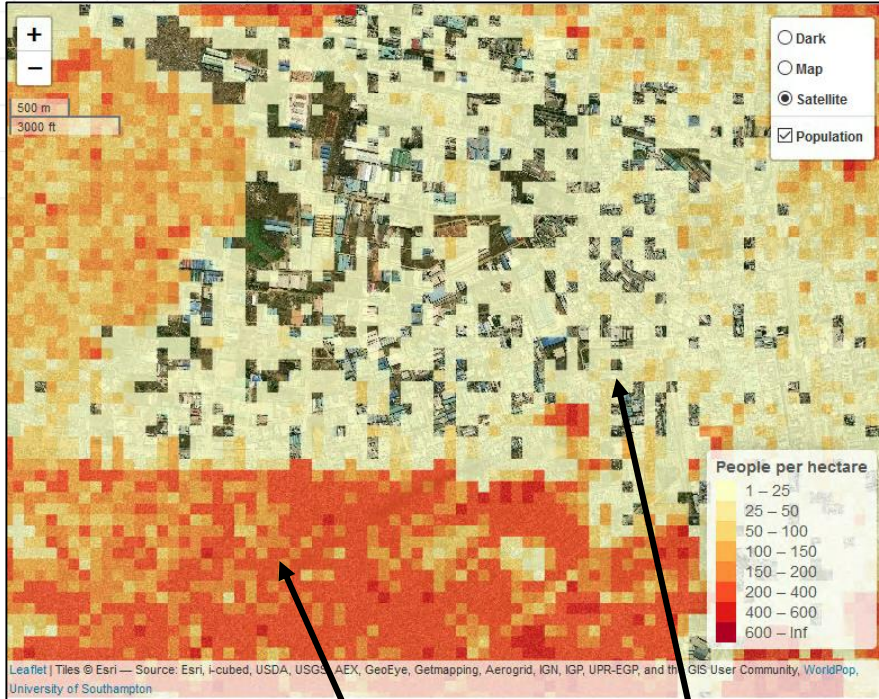
Population estimates

Population per grid cell





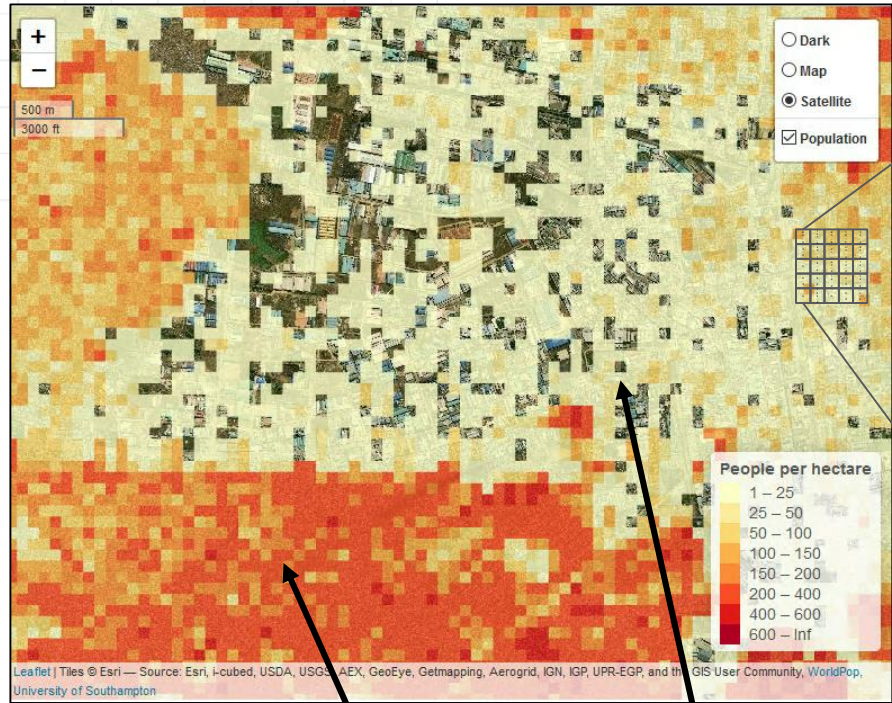
What are gridded population estimates?



High pop. count

Low pop. count

What are gridded population estimates?



Approx. 100m

| | | | | |
|----|-----|-----|----|----|
| 60 | 121 | 62 | 18 | 12 |
| 1 | 43 | 125 | 60 | 61 |
| 0 | 9 | 68 | 17 | 19 |
| 2 | 10 | 15 | 1 | 15 |
| 0 | 143 | 0 | 2 | 3 |



High pop. count

Low pop. count

What are the advantages of gridded population data?

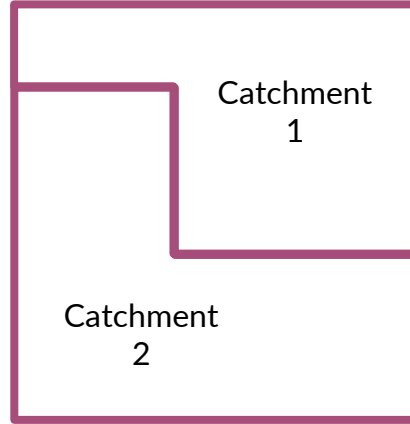
- Flexibility in terms of spatial aggregation - population estimates can be calculated for different geographic units at a range of scales:
 - EAs, Wards, Constituencies, Districts
 - Health catchments
 - Within a specified distance of a feature e.g. 5km from health facility
- Integration with other gridded datasets



Calculating aggregated population estimates (total per catchment area)

| | | | | |
|----|-----|-----|----|----|
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Gridded population estimates (raster)

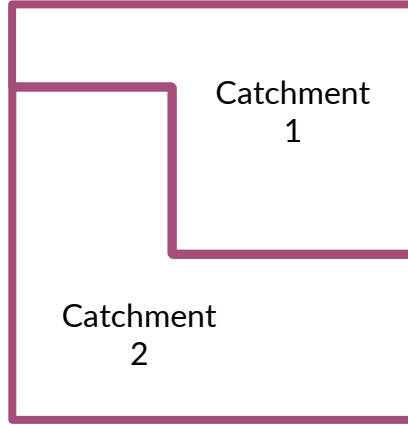


Catchment boundaries (vector)

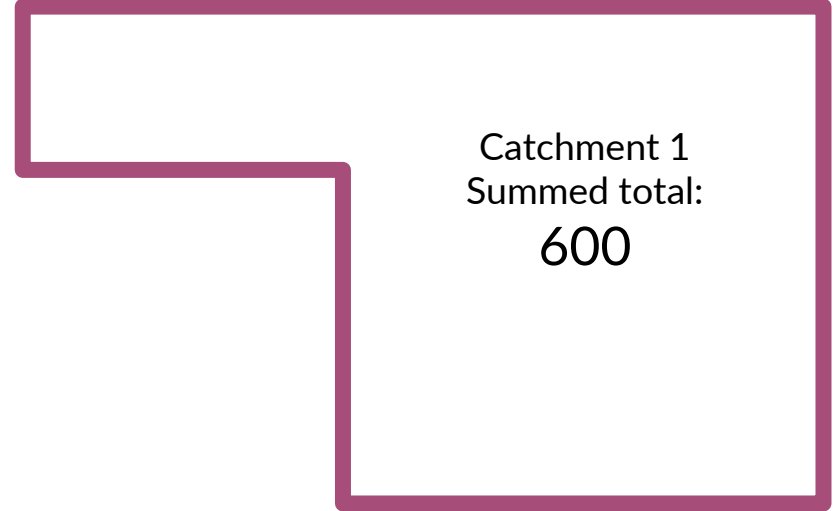
Calculating aggregated population estimates

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Gridded population estimates (raster)



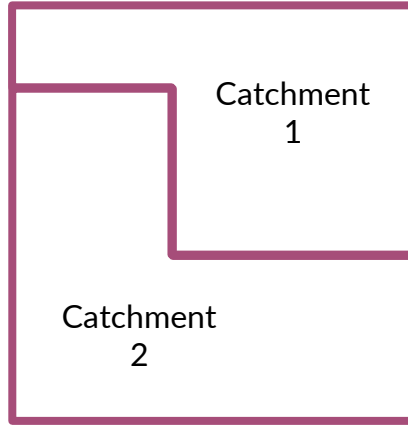
Catchment boundaries (vector)



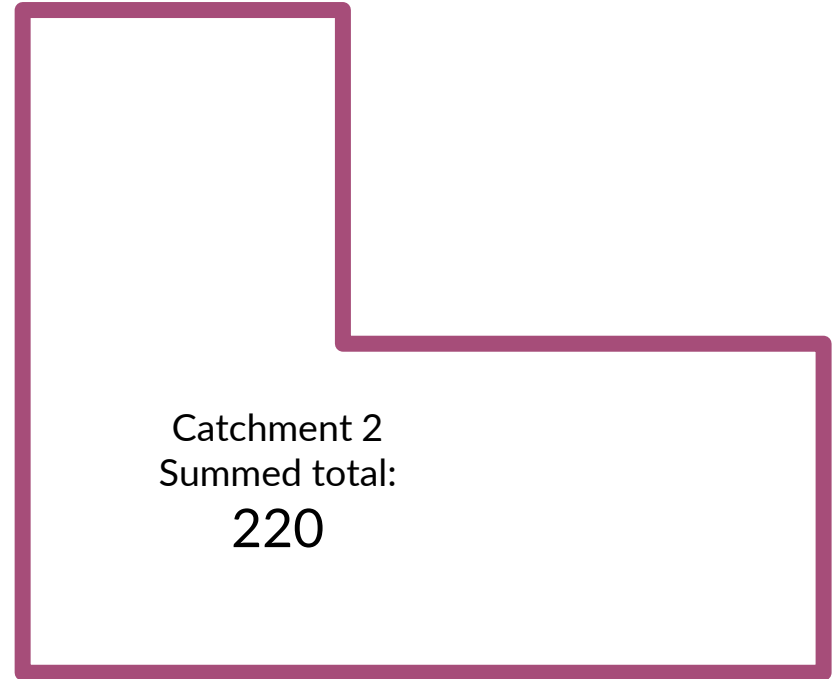
Calculating aggregated population estimates

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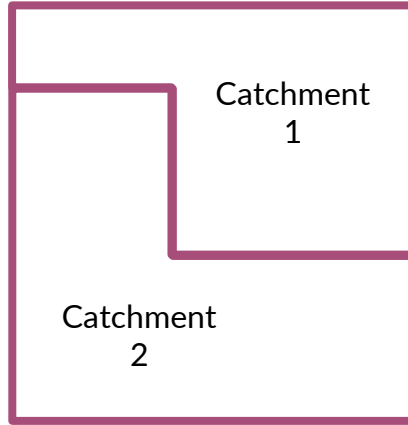
Catchment boundaries (vector)



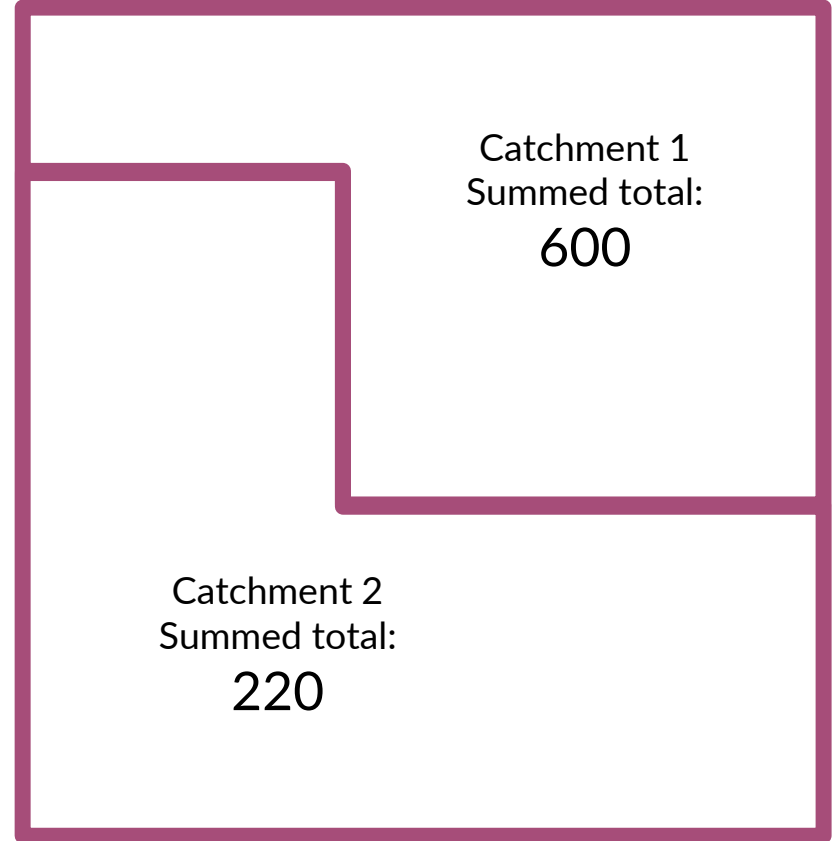
Calculating aggregated population estimates

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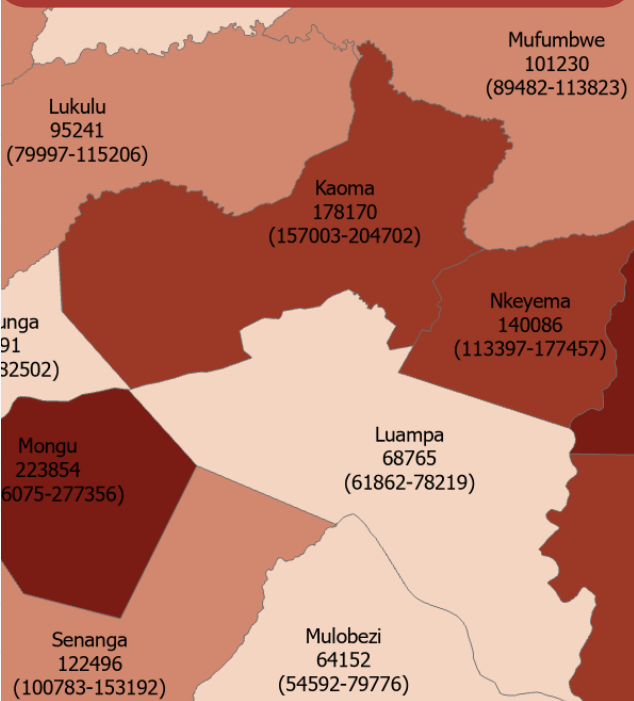
Gridded population estimates (raster)



Catchment boundaries (vector)



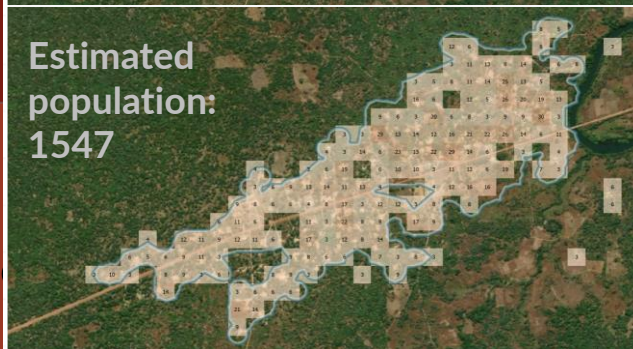
Administrative units / Health units



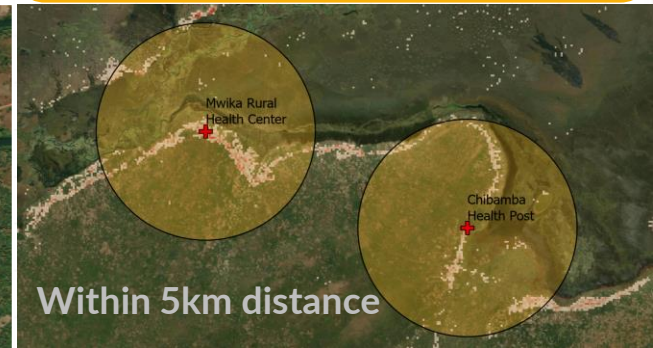
Settlement extents



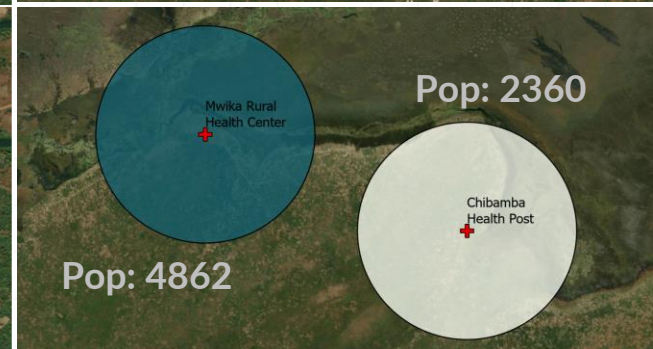
Estimated
population:
1547



Custom e.g. specified proximity/distance



Within 5km distance

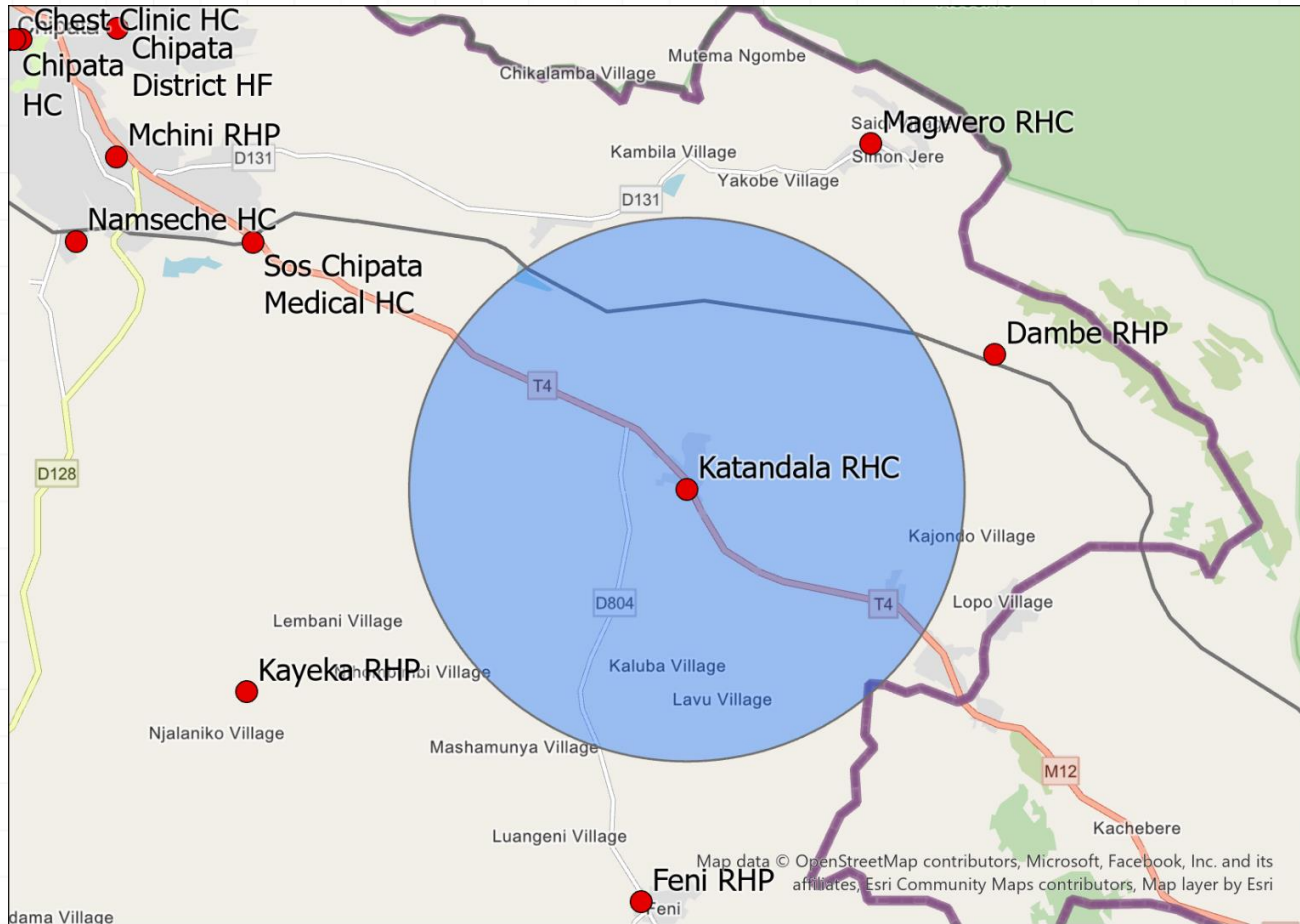


Pop: 4862

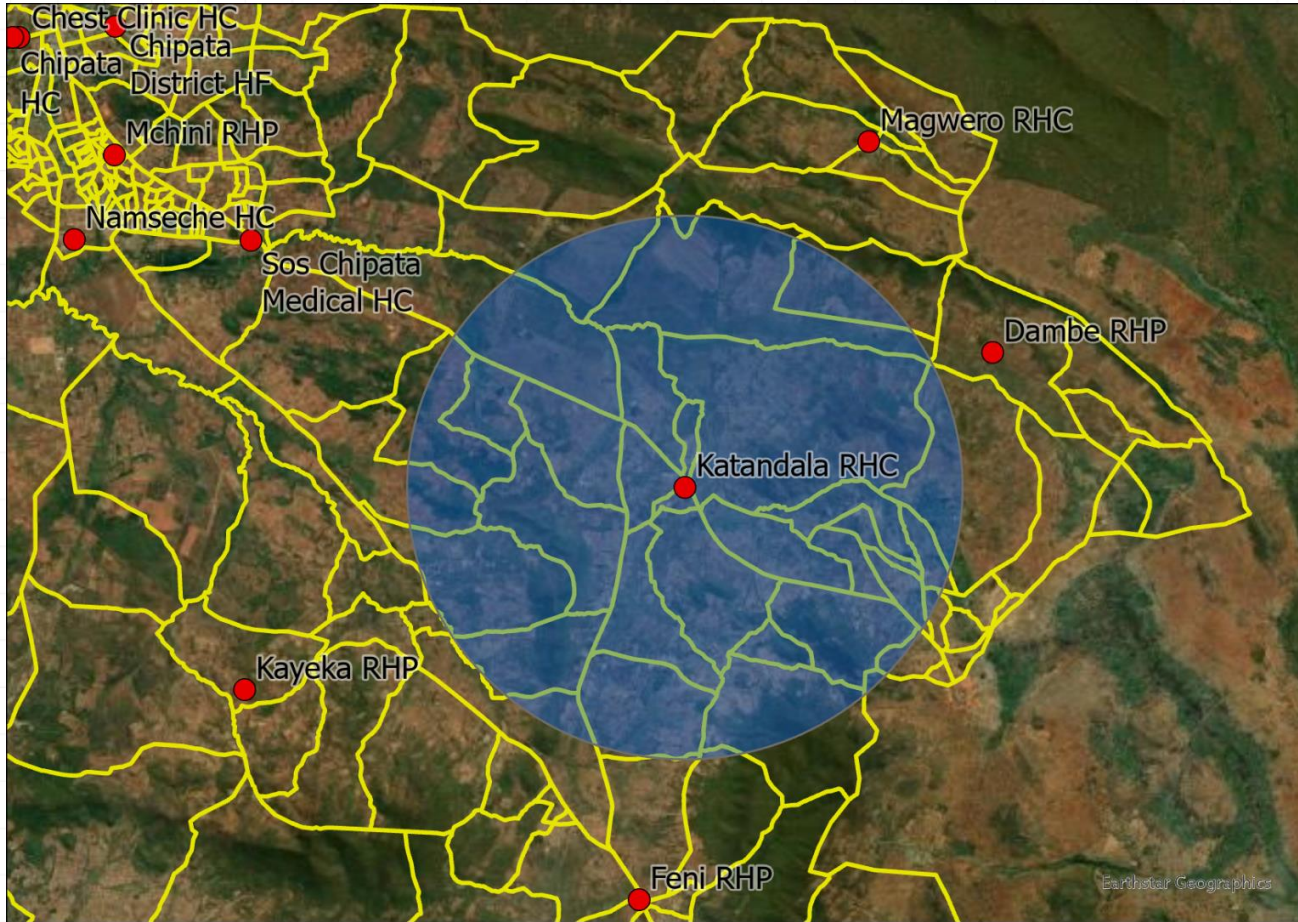
Pop: 2360

Flexibility in aggregation of population estimates

Calculating population within 5km of health facility

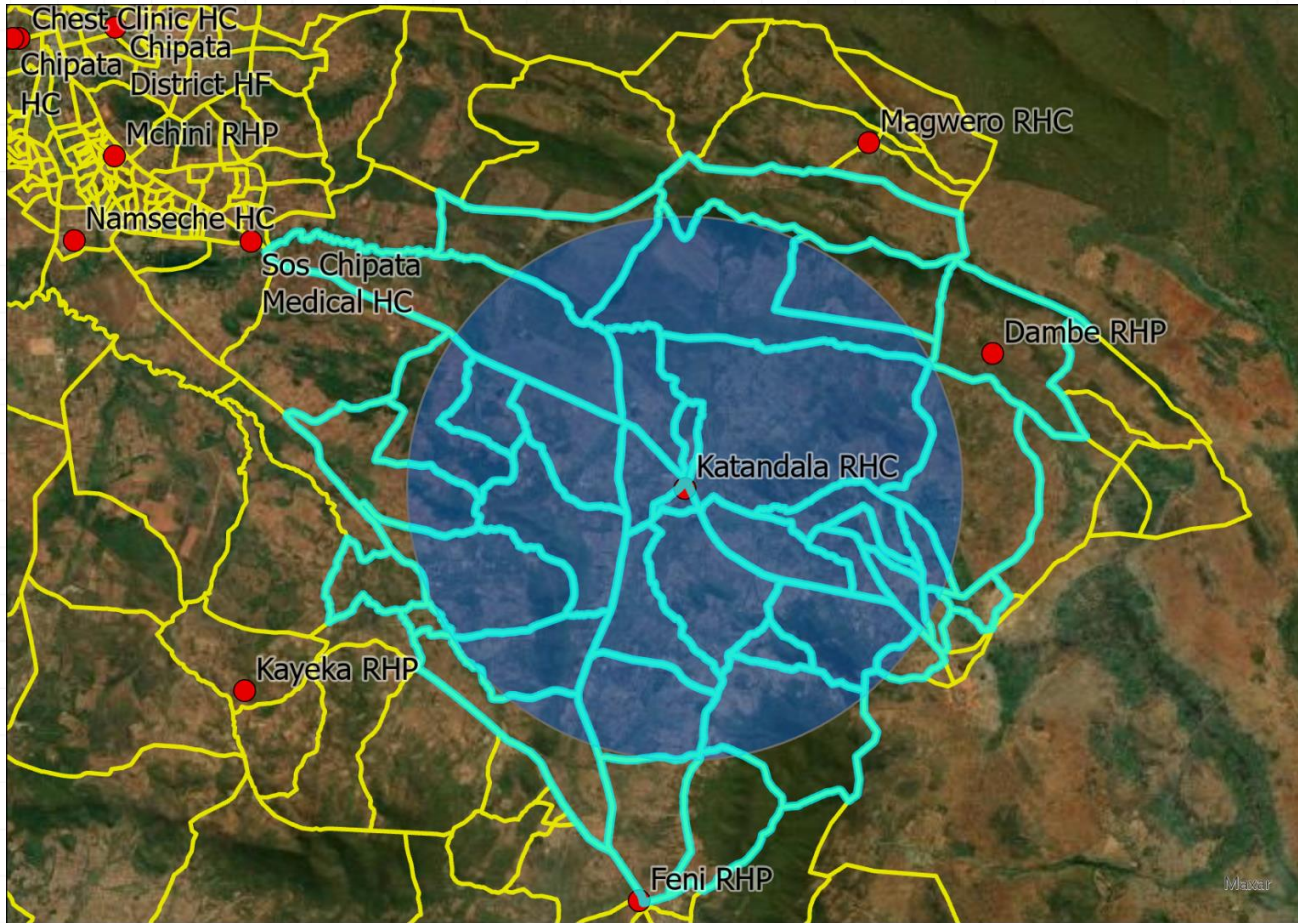


Calculating population within 5km of health facility



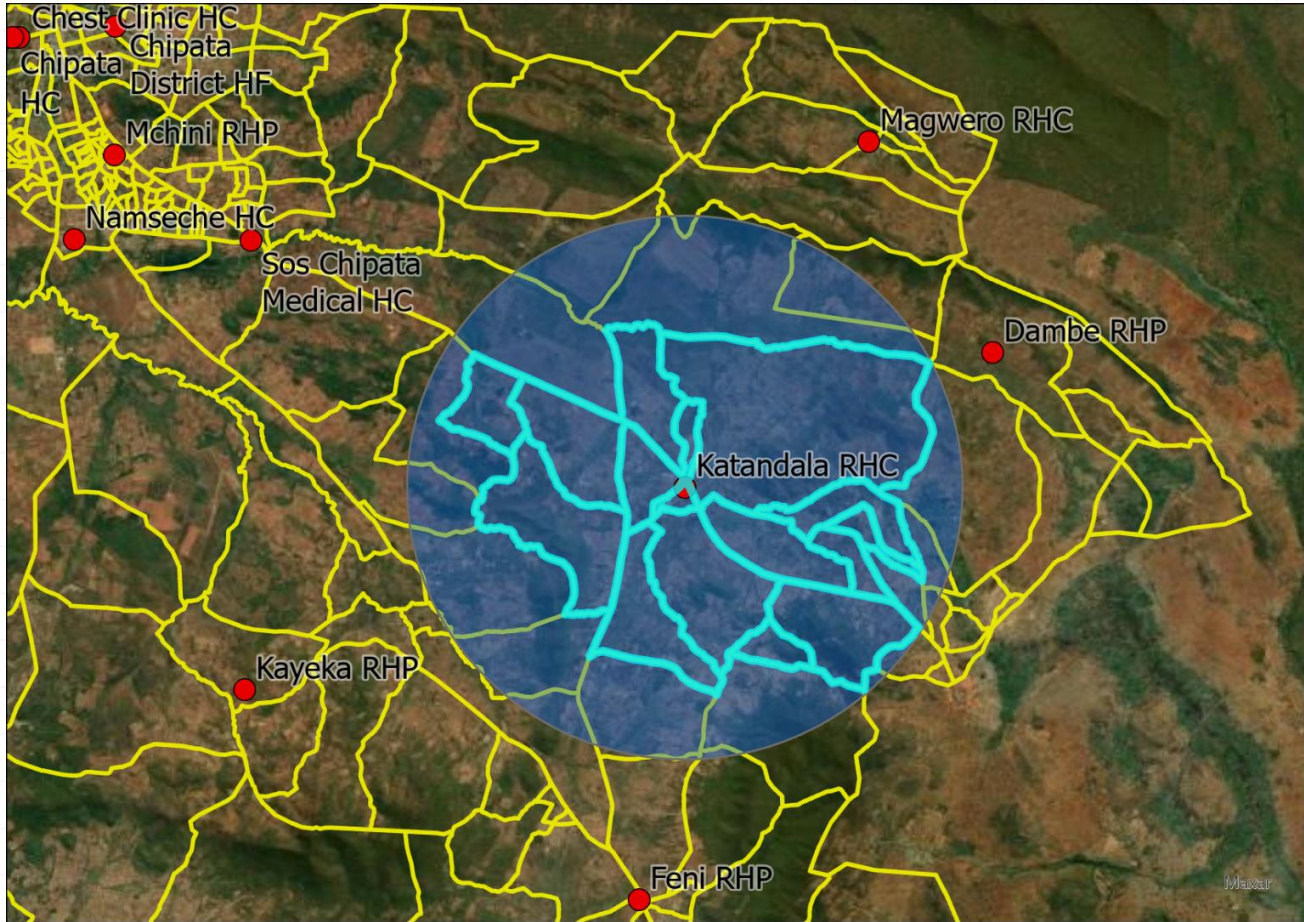
Calculating population within 5km of health facility

39 EAs

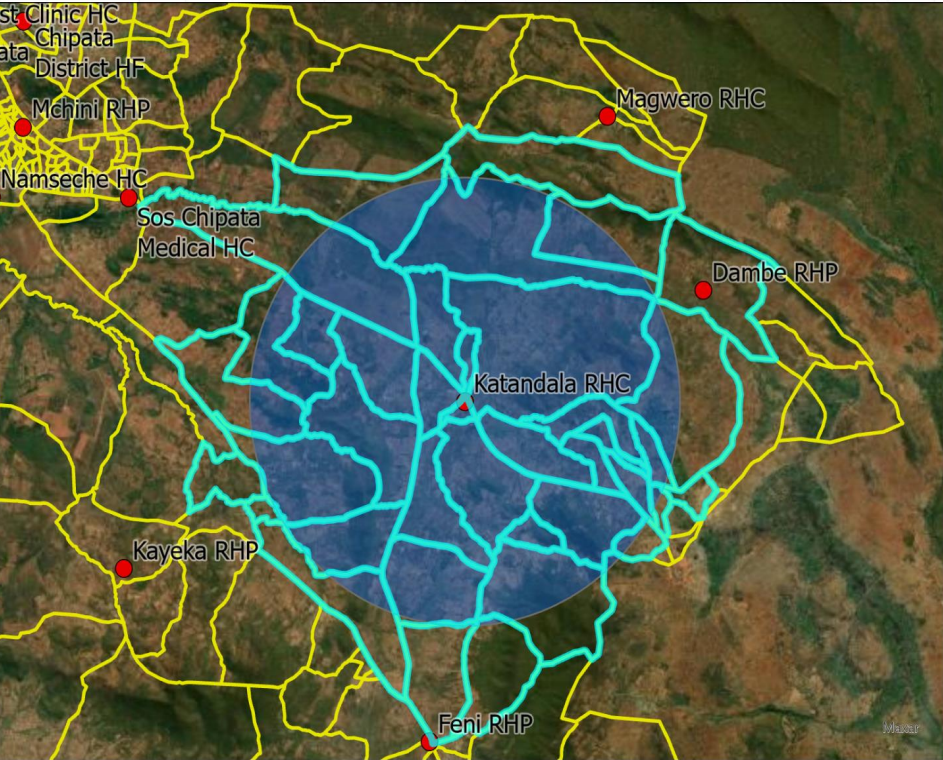


Calculating population within 5km of health facility

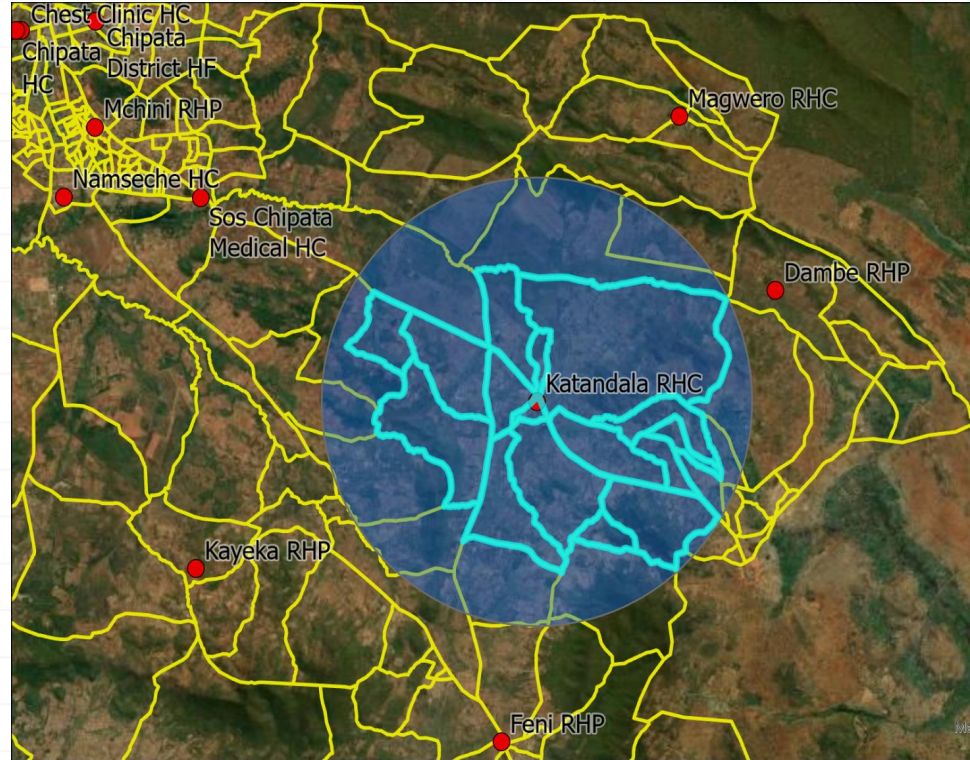
16 EAs



Calculating population within 5km of health facility

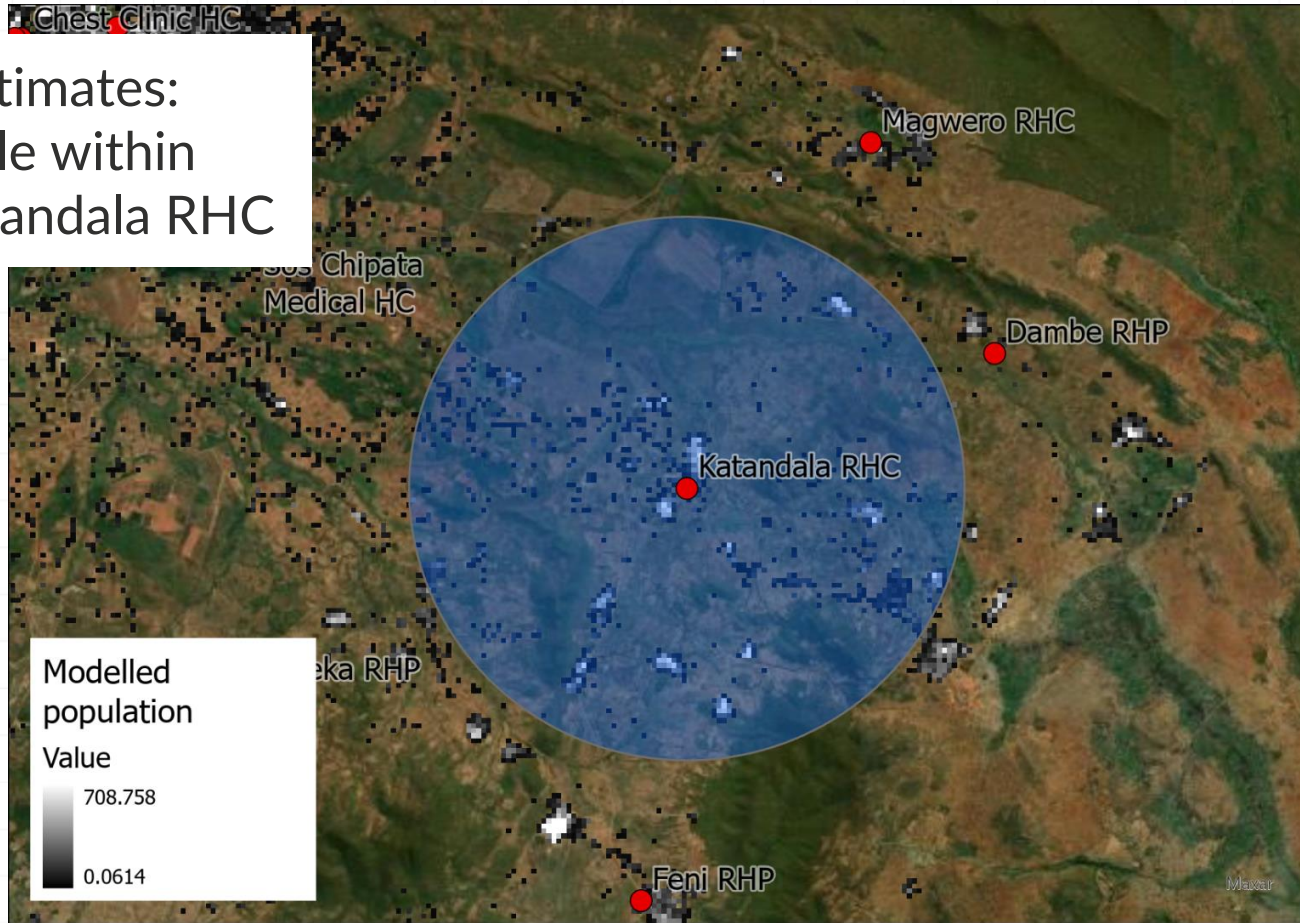


39 EAs

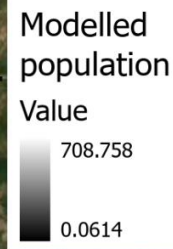


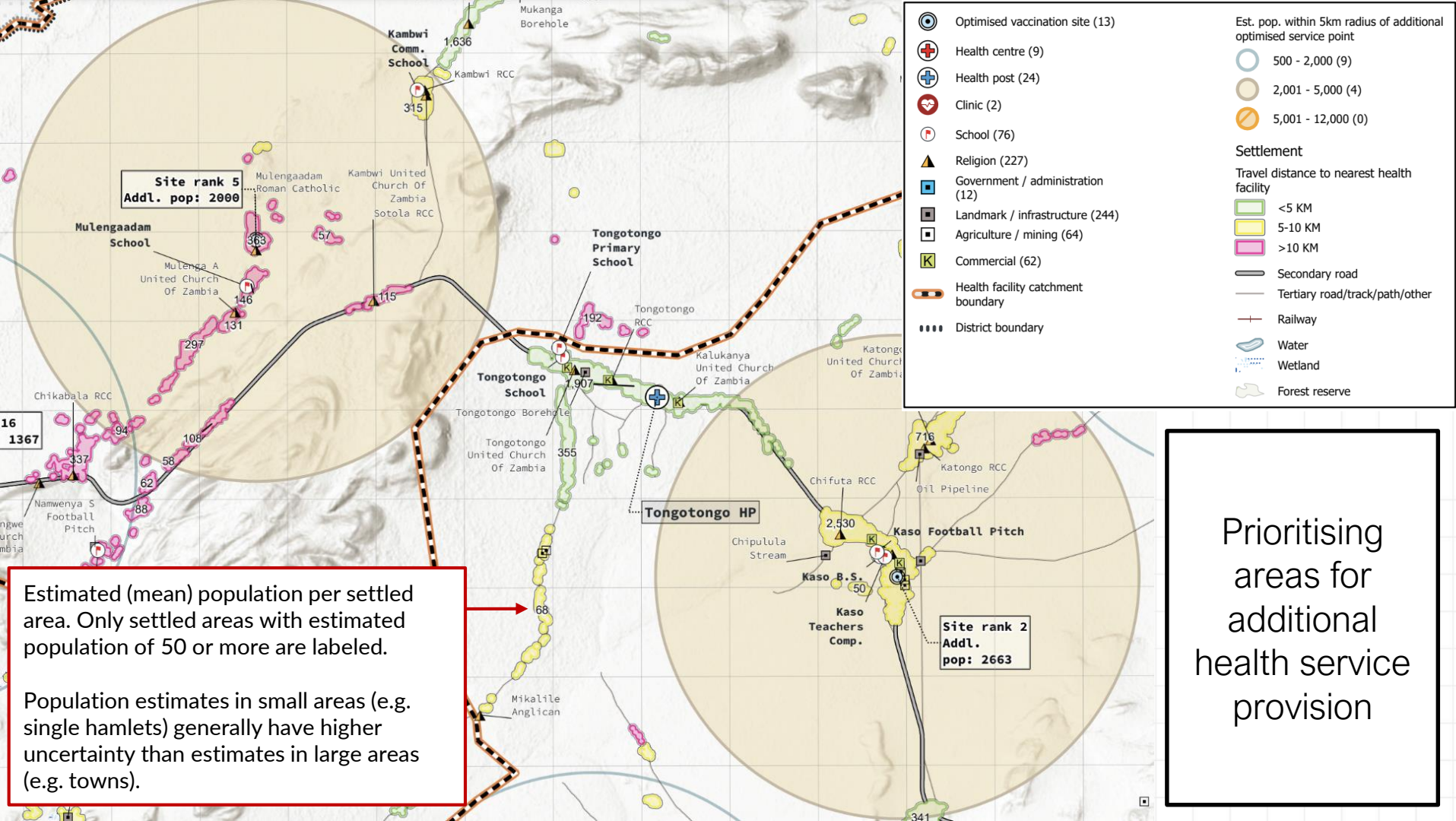
16 EAs

Calculating population within 5km of health facility



Gridded estimates:
1870 people within
5km of Katandala RHC





Questions?