

**INFRASTRUCTURE MAPPING EXERCISE AND  
THE HOUSEHOLD ESTIMATE:  
CASE STUDY BAIDOA**

## EXPLICATION OF THE HOUSEHOLD ESTIMATE CALCULATED.

- For each mapping exercise, we are trying to find the correlation in-between data collected during the case studies and average surface area per household.
- This can be found in two parameters: **shelter typology** and **shelter density**

## **SHELTER DENSITY**

- By classifying each household in low/medium/high shelter density and by doing this in XXX case study areas, we can come up with average shelter densities for low, medium and high.
- The average shelter density L/M/H can be used afterwards to derive a household estimate for the other settlements that were random sampled.

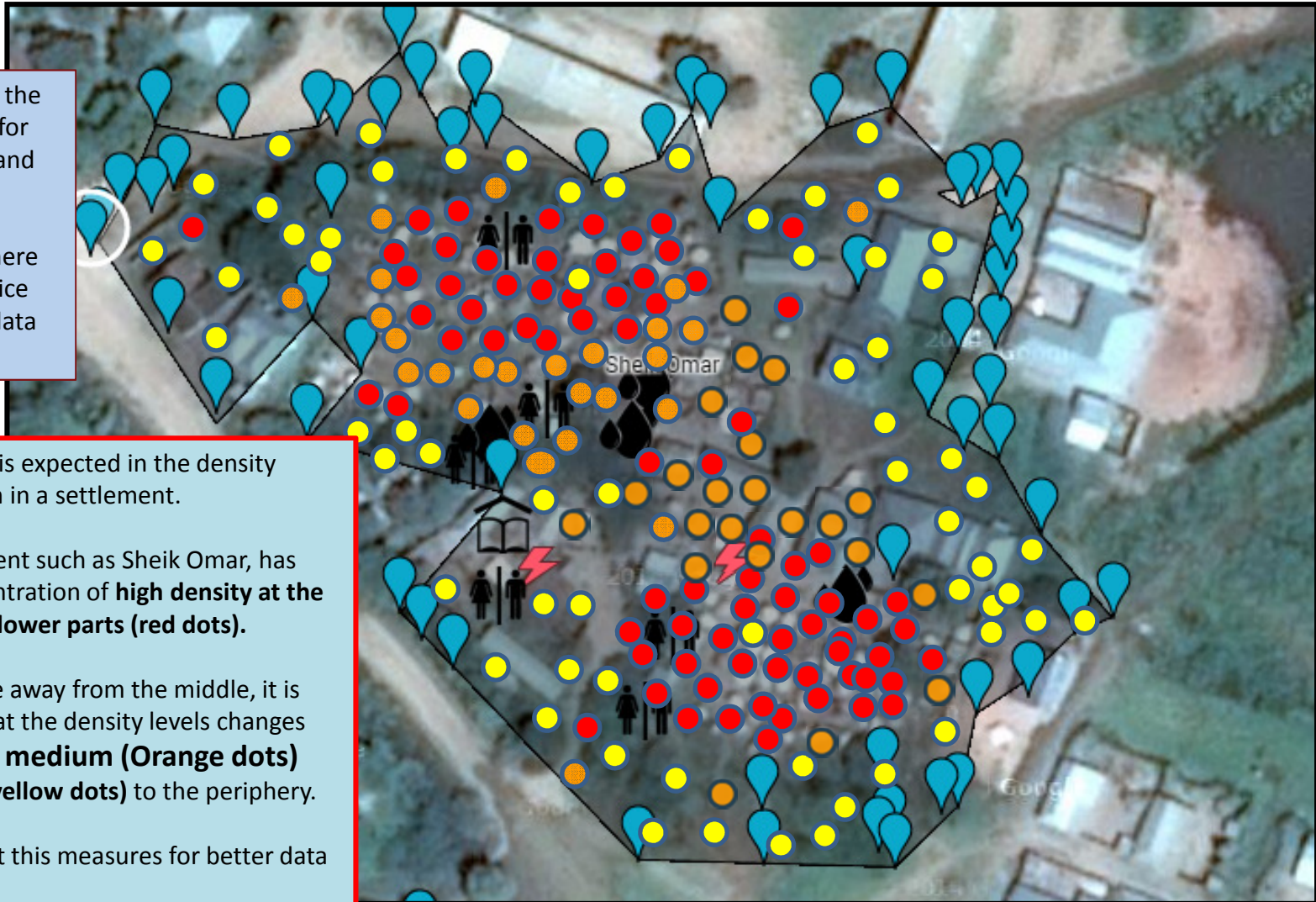
## **SHELTER TYPOLOGY**

- We know that in general, HHs with permanent shelters have more land availability than transitional shelters and that TS have more land availability than buuls. By classifying each household in buul/TS/PS shelter and by doing this in XXX case study areas, we can come up with average shelter densities for buuls/TS/PS.
- The average for each shelter typology can be used afterwards to derive a household estimate for the other settlements that were random sampled.

EXAMPLE:  
Overview of the best practice in a case study data capture such as  
Sheik Omar Settlement (190HH)

We noticed that the density capture for this settlement and others were not captured appropriately, here is the best practice for the density data capture

- This is what is expected in the density classification in a settlement.
- The settlement such as Sheik Omar, has more concentration of **high density at the middle and lower parts (red dots)**.
- As you move away from the middle, it is expected that the density levels changes from high to **medium (Orange dots)** and **lower (yellow dots)** to the periphery.
- Please adopt this measures for better data capture



# Common mistakes in Density Capture.

- Enumerators tend to assume or make decision to capture a settlement as high, medium or low density uniformly which is not the case
- Skipping of density capture for household which are locked or whose members are absent, in this case, it is advisable to capture the household and ask the neighbour questions about the household and in case no one has information, the GPS data is captured.
- Data collectors do not have a tag or marks to put in the HH that densities have been captured leading to double density data capture

# HIGH SHELTER DENSITY



GAALKAACYO

BOSSASSO

MOGADISHU

## DEFINITION OF HIGH SHELTER DENSITY

- In general, *HIGH* shelter density can be found in traditional housing (buuls), transitional housing and permanent housing.
- There is **very limited space around the structures** for recreational activity.
- Shelters are back to back and there is hardly any space in-between the different shelters.
- The front of the shelter has often access to an access **road 1 meter or less.**
- Approximately, the shelters occupy **nearly 100%** of the plot of the beneficiaries.

HARGEYSA

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## PICTURES OF HIGH SHELTER DENSITY



# MEDIUM SHELTER DENSITY



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## DEFINITION OF MEDIUM SHELTER DENSITY

- In general, *MEDIUM* shelter density can be found in traditional housing (buuls), transitional housing and permanent housing.
- There is **some space around the structures** for recreational activity, but it is very limited to cooking/washing.
- The front of the shelter has often access to an access **road wider than 2 meters.**
- Approximately, the shelters occupy **more than 60 %** of the plot of the beneficiaries.

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## PICTURES OF MEDIUM SHELTER DENSITY



# LOW SHELTER DENSITY



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## DEFINITION OF LOW SHELTER DENSITY

- In general, low shelter density can be found in traditional housing (buuls), transitional housing and permanent housing.
- Nearly all **shelters are not attached**. Sometimes, shelters can be built back-to-back to have an effective space.
- There is **a lot of space around the house** for recreational activity.
- Approximately, the shelters occupy **less than 50%** of the plot.

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## PICTURES OF LOW SHELTER DENSITY



HARGEYSA

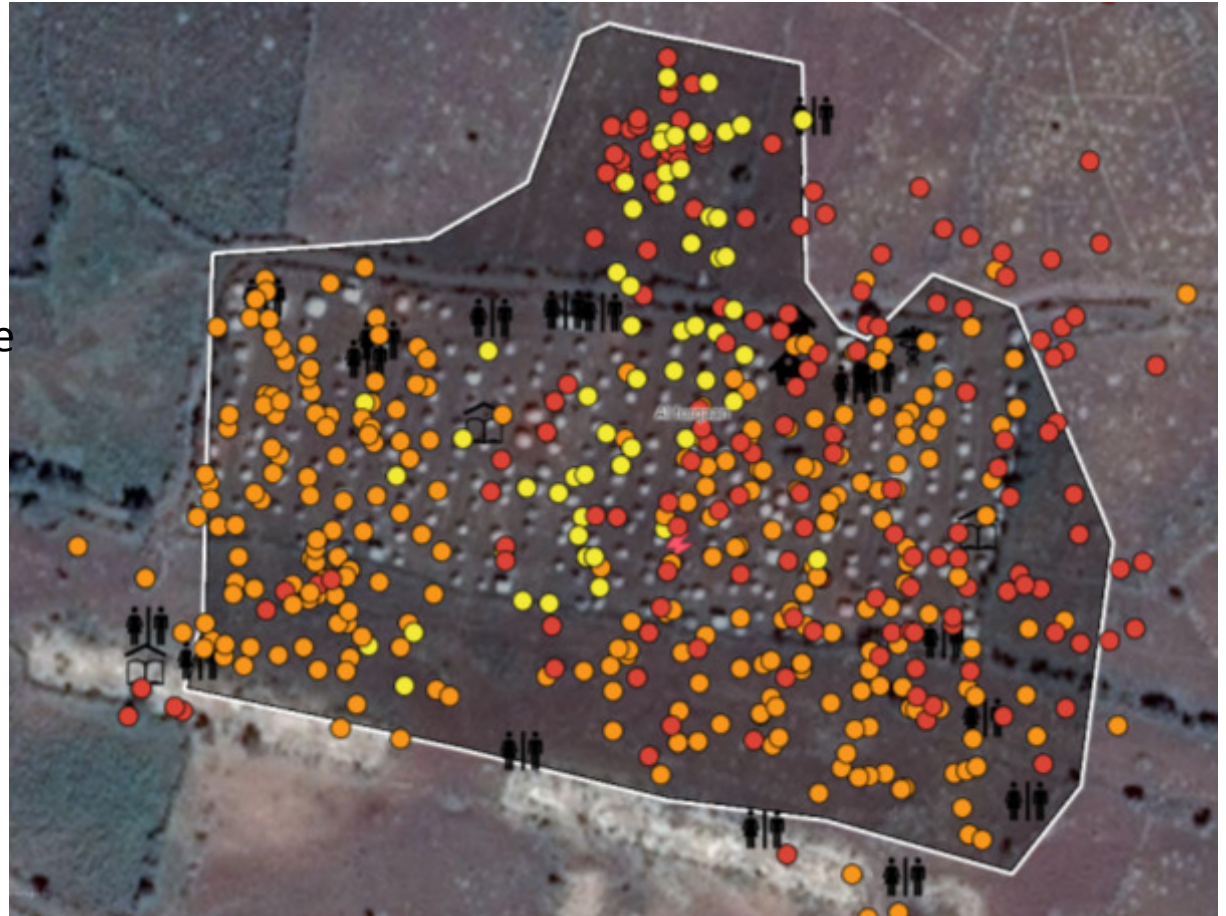
GAALKACYO

MOGADISHU

# Case studies

### **CASE STUDY 1: ADC 1**

- \*KII estimate: 280 HH
- \*Total HHs counted: 524
- \*Perimeter quite ok
- \*Perhaps some pockets were not accounted for.
- \*Case study area should be smaller

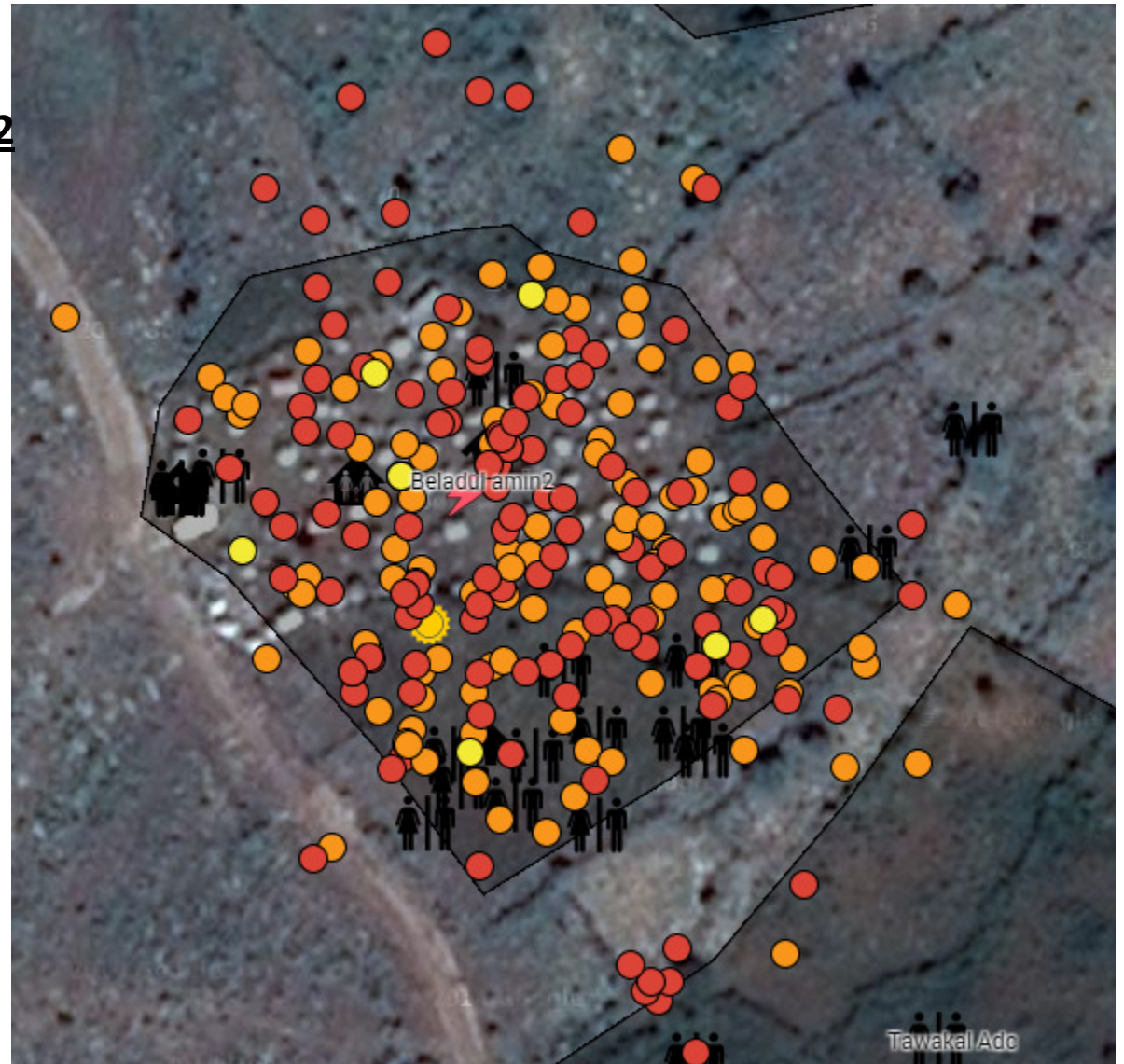


## **CASE STUDY 2: Beladul Amin2**

\*KII estimate: 114 HH

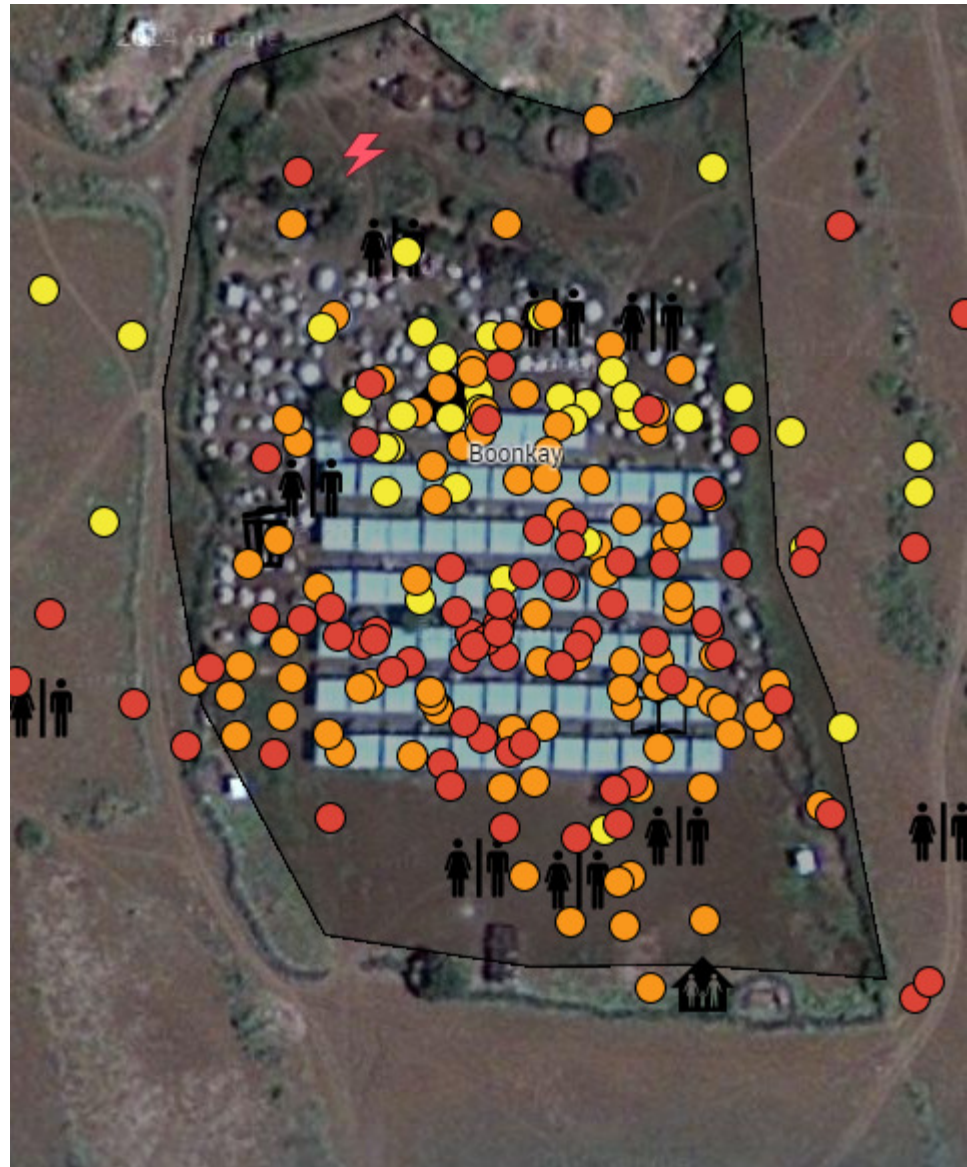
\*Total HHs counted: 201

\*Perimeter quite ok (90% included)



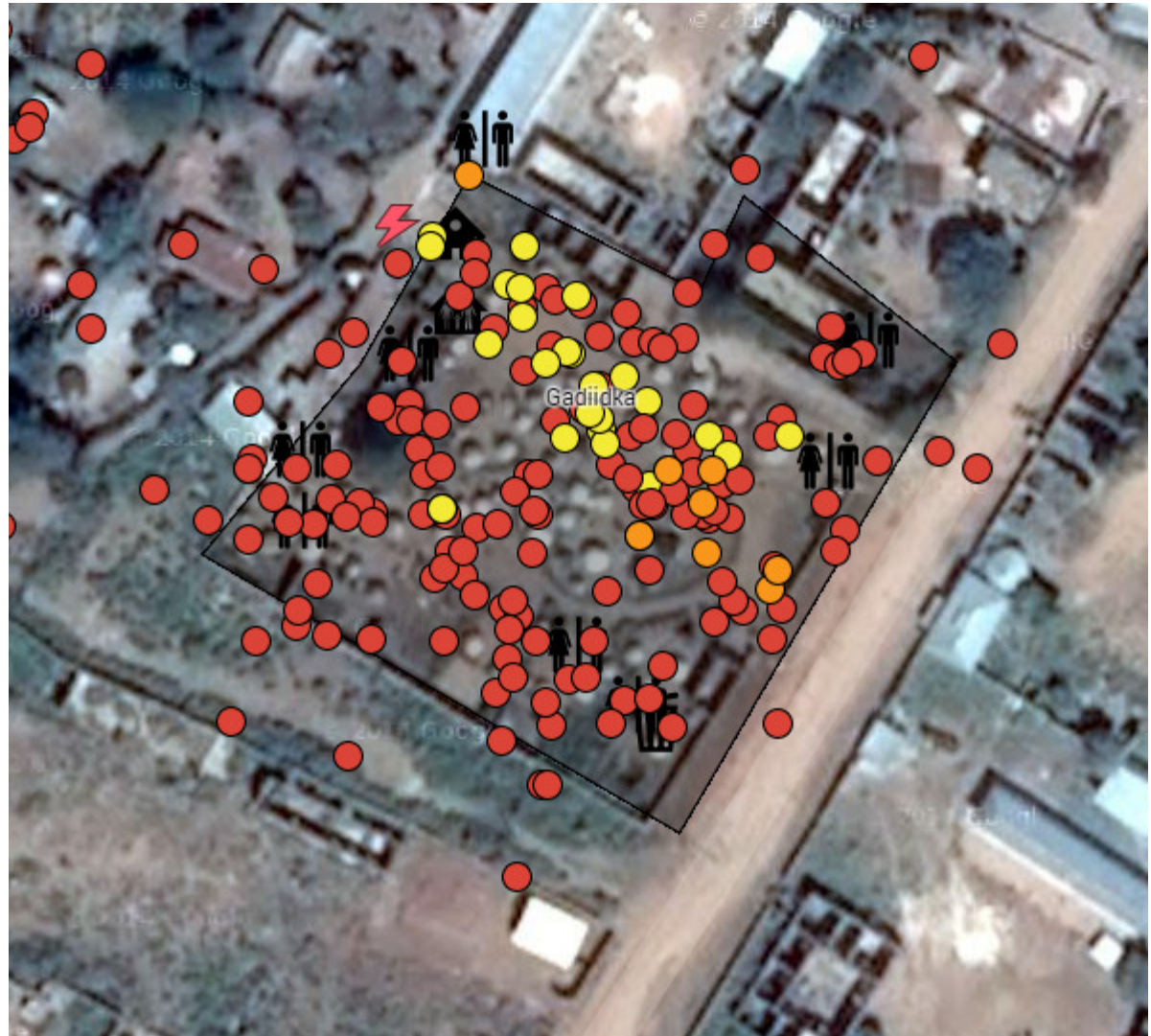
### **CASE STUDY 3: Boonkay**

- \*KII estimate: 115 HH
- \*Total HHs counted: 205
- \*Perimeter quite ok
- \*Perhaps some pockets were not accounted for. Or perhaps the settlement is thinner on the edges, but why high density.
- \*Case study area should be smaller



**CASE STUDY 4: Gadiika**

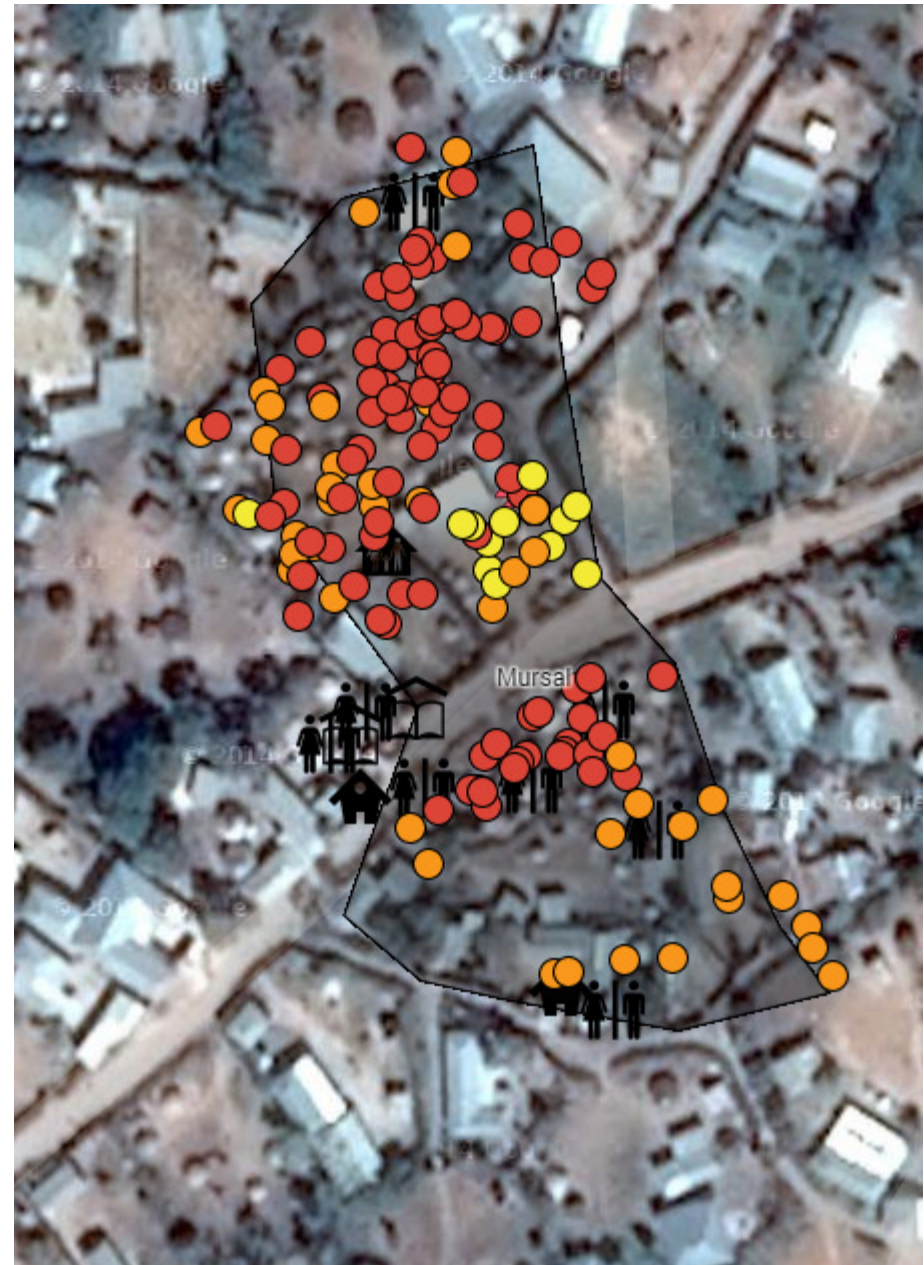
- \*KII estimate: 127 HH
- \*Total HHs counted: 193
- \*Perimeter quite ok



### **CASE STUDY 5: Mursal**

- \*KII estimate: 128 HH
- \*Total HHs counted: 160
- \*Perimeter quite ok
- \*Perhaps some pockets were not accounted for. As you see in the south, there are some durable buildings. In this case 20% of the perimeter should be considered as built up.

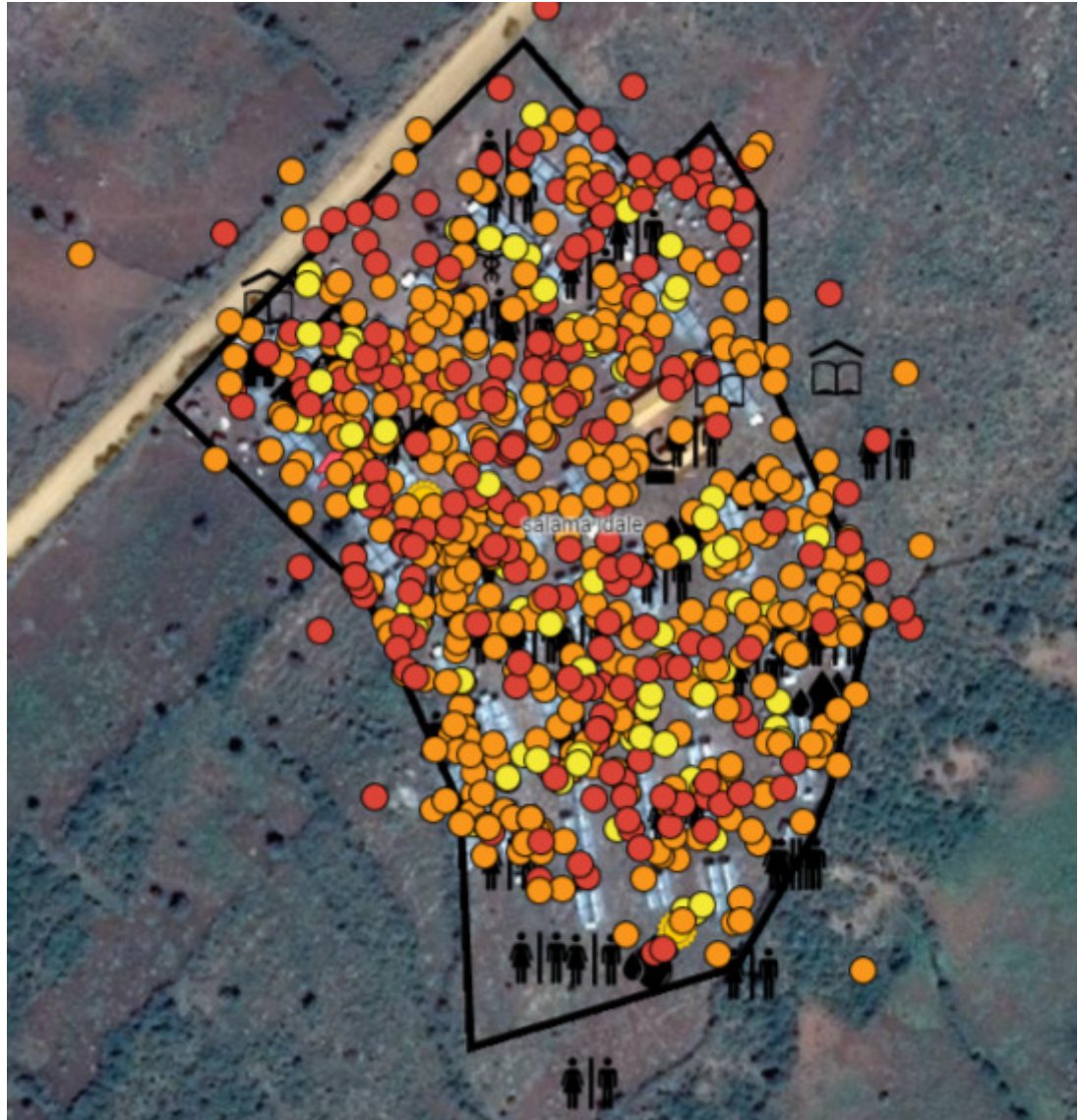
**Slight discrepancy in-between the average estimate and the real estimate (-22%).**



## **CASE STUDY 6: Salama Idale**

- \*KII estimate: 350 HH
- \*Total HHs counted: 680
- \*Perimeter quite ok
- \*Case study area should be slightly smaller

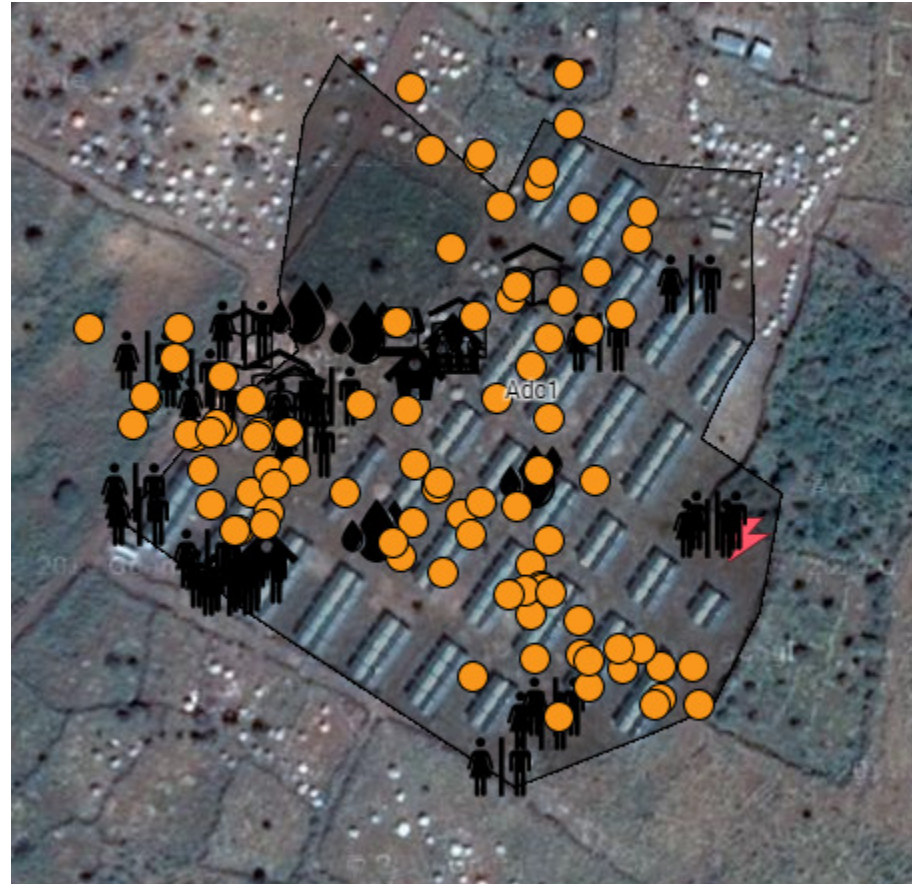
**Big discrepancy in-between the average estimate and the real estimate (-25% and -43%). This is a very planned settlement with quite broad roads and public areas. Therefore a higher average surface area should be counted.**



# Irregularities

### **PROBLEM CASE 1: ADC 1**

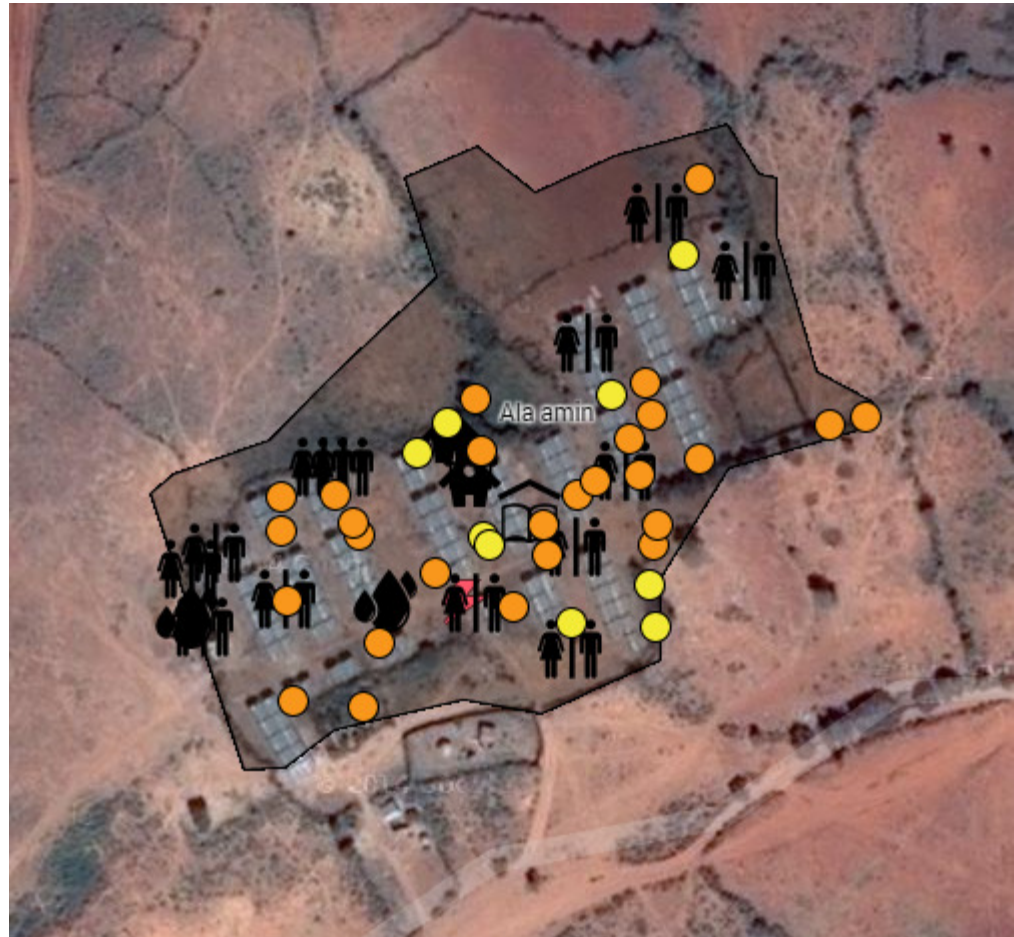
- \*KII estimate: 254 HH
  - \*Total HHs calculated: 591
  - \*Perimeter quite ok
  - \*92 HHs were randomly taken.
- Seems to be ok...



**PROBLEM CASE 2: ala amin**

- \*KII estimate: 170 HH
- \*Total HHs calculated: 487
- \*Perimeter quite ok
- \*36 HHs were randomly taken.

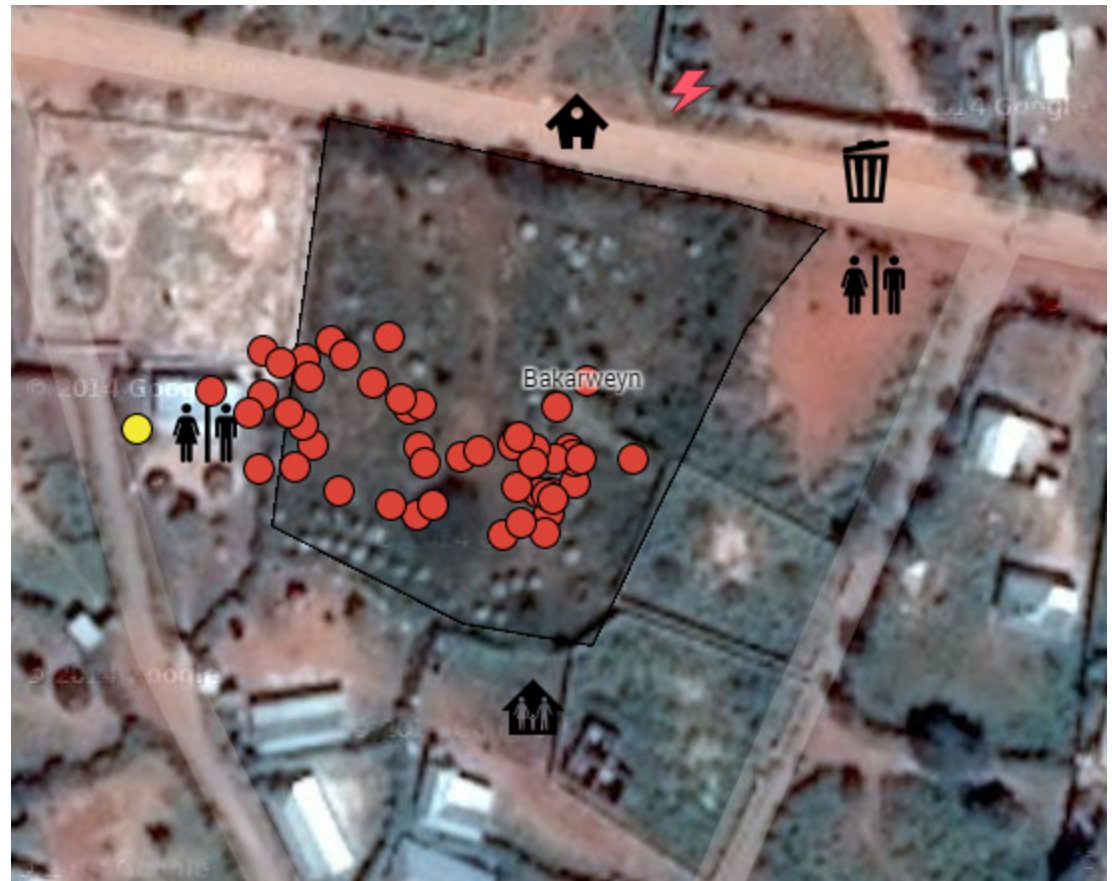
To be discussed in the field



### **PROBLEM CASE 1: Bakarweyn**

- \*KII estimate: 400 HH
- \*Total HHs calculated: 115
- \*Perimeter quite ok
- \*92 HHs were randomly taken.

Seems to be ok... Small area



## **PROBLEM CASE 1: Idale 1**

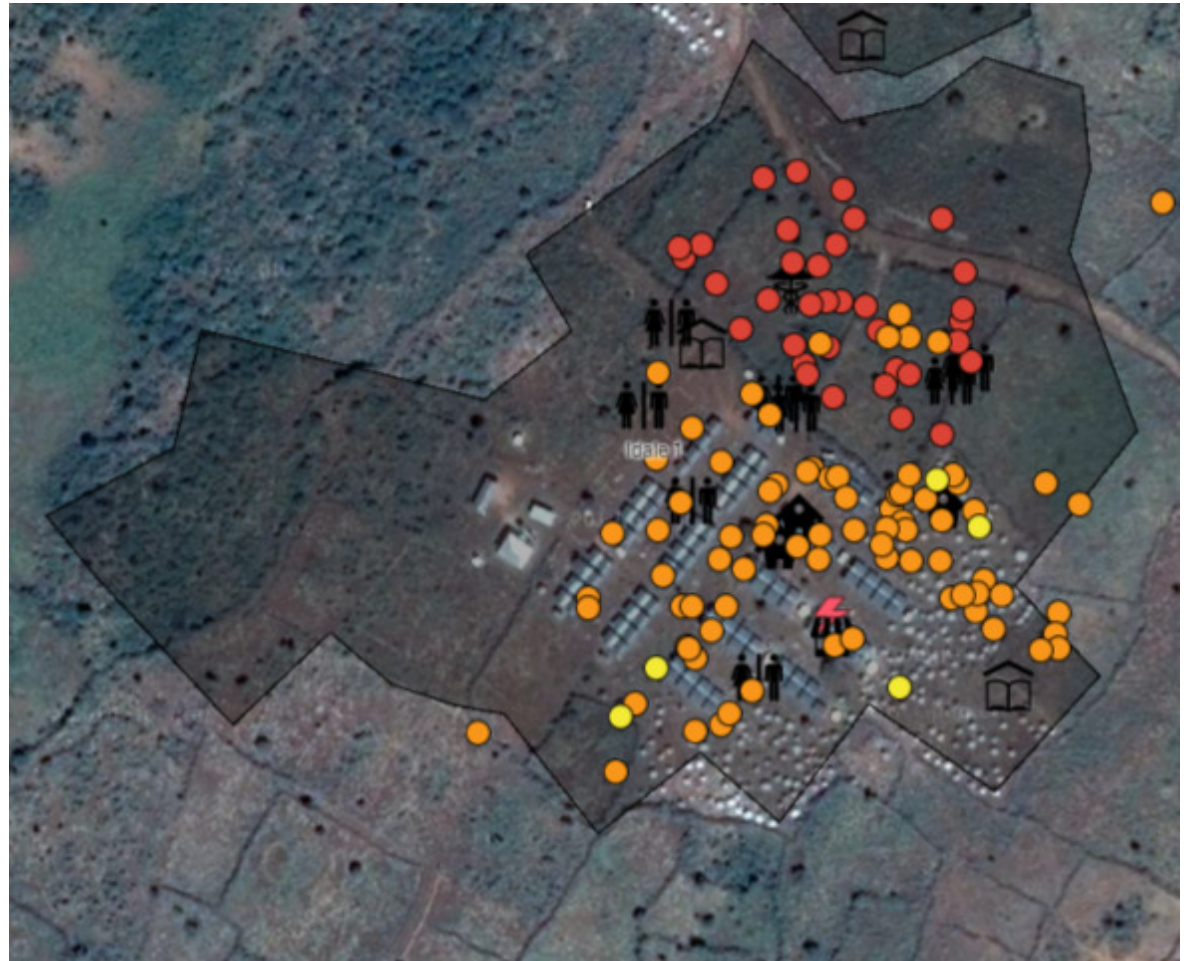
\*KII estimate: 347 HH

\*Total HHs calculated: 1487

\*Perimeter ???

\*139 HHs were randomly taken. This is partly a planned settlement with surrounding un-planned buuls...

Needs to be further discussed at field level.



**PROBLEM CASE 1: Wadajir 4**

- \*KII estimate: 55 HH
  - \*Total HHs calculated: 850
  - \*Perimeter ???
  - \*20 HHs were randomly taken.
- This is too small.

Needs to be further discussed at field level.



## **PROBLEM CASE 1: Xanano 2**

- \*KII estimate: 515 HH
- \*Total HHs calculated: 2400
- \*Perimeter seems to be ok
- \*119 HHs were randomly taken. This is partly a planned settlement with surrounding un-planned buuls...

Needs to be further discussed at field level. But data seems to show that we have more than 1500 HHs.

