**Calculation of Household Estimation (Version 2)**

**Theory:** Household estimation or average household size is the process of calculating the average household size or the total number of households. The average household size is calculated by dividing the total household population by the number of occupied households. The average household size can be obtained from census information or household surveys.

**Approach:** This time rather than general areas we are working on wards from Delhi. We have used the ***shapefile of Delhi Wards 2022***, which also provides the ***population of the wards*** using consensus. Using the GIS tool we are developing, we calculate the ***number of households*** / buildings in the given ward. So thus ***household estimation*** is total population by the number of occupied households. Further we can find out the ***population density*** which is total population by total area of the ward (we are calculating ward area through GIS tool too).

**Example and Calculation:**

We are taking a ward named – “***Bhalswa***”, wardcode – 17.

Total Population: 69332

Buildings Detected: 5430

Area of the Ward: 1.025 Sq Km

Household Estimation = 69332 / 5430 = 12.7683241252

Calculated Population Density = 69332 / 1.025 **≈** 67641 people per Sq Km

**Screenshots:**

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