# Sampling from Big Blocks - Karachi East and Kambar

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September 14, 2023

## Karachi East District

| ## | # / | A tibble: 27 x 3            |              |             |
|----|-----|-----------------------------|--------------|-------------|
| ## |     | Groups: uc, town.x [27]     |              |             |
| ## |     | uc                          | town.x       | n           |
| ## |     | <chr></chr>                 | <chr></chr>  | <int></int> |
| ## | 1   | Akhtar Colony-01            | Jamshed Town | 3           |
| ## | 2   | Azam Basti-03               | Jamshed Town | 2           |
| ## | 3   | Central Jacob Lines-09      | Jamshed Town | 5           |
| ## | 4   | Chanesar Goth-04            | Jamshed Town | 3           |
| ## | 5   | Civic Centre-02             | Gulshan Town | 2           |
| ## | 6   | Dalmia-07                   | Gulshan Town | 2           |
| ## | 7   | Delhi Mercantile Society-01 | Gulshan Town | 3           |
| ## | 8   | Essa Nagri-04               | Gulshan Town | 2           |
| ## | 9   | Garden East-11              | Jamshed Town | 3           |
| ## | 10  | Gillani-06                  | Gulshan Town | 3           |
| ## | 11  | Gujro-04                    | East - Gadap | 2           |
| ## | 12  | Gulshan-e-Iqbal I-05        | Gulshan Town | 2           |
| ## | 13  | Gulshan-e-Iqbal II-09       | Gulshan Town | 2           |
| ## | 14  | Gulzar-e-Hijri-12           | Gulshan Town | 4           |
| ## | 15  | Jamali Colony-08            | Gulshan Town | 2           |
| ## | 16  | Jamshed Quarters-10         | Jamshed Town | 4           |
| ## | 17  | Jat Line-08                 | Jamshed Town | 5           |
| ## | 18  | Manzoor Colony-02           | Jamshed Town | 2           |
| ## | 19  | Mehmoodabad-05              | Jamshed Town | 3           |
| ## | 20  | Metroville                  | Gulshan Town | 2           |
| ## | 21  | P.E.C.H.S. I - 06           | Jamshed Town | 3           |
| ## | 22  | P.E.C.H.S. II - 07          | Jamshed Town | 4           |
| ## | 23  | Pakistan Quarters           | Jamshed Town | 3           |
| ## | 24  | Pehlwan Goth-10             | Gulshan Town | 2           |
| ## | 25  | PIB Colony-03               | Gulshan Town | 3           |
| ## | 26  | Safooran Goth-13            | Gulshan Town | 2           |
| ## | 27  | Soldier Bazar-12            | Jamshed Town | 3           |

### Big Blocks Sample

```
## # A tibble: 27 x 5
## # Groups:
               uc [27]
##
      name
                                                                       pop_per~1 blocks
                           uс
                                                         town.x
##
      <chr>
                           <chr>
                                                         <chr>
                                                                           <dbl>
                                                                                  <dbl>
##
    1 akhtar_colony_3
                           Akhtar Colony-01
                                                         Jamshed Town
                                                                          17894
                                                                                      10
##
    2 azambasti_2
                           Azam Basti-03
                                                         Jamshed Town
                                                                          27392.
                                                                                      16
    3 jacob_lines_4
                           Central Jacob Lines-09
                                                         Jamshed Town
                                                                          18581.
                                                                                     11
##
##
    4 chanesar 2
                           Chanesar Goth-04
                                                         Jamshed Town
                                                                          20133.
                                                                                      12
##
  5 civic_centre_2
                           Civic Centre-02
                                                         Gulshan Town
                                                                          43468.
                                                                                      25
  6 shanti nagar 1
                           Dalmia-07
                                                         Gulshan Town
                                                                          29926
                                                                                      18
##
  7 dehli_merchantile_2 Delhi Mercantile Society-01 Gulshan Town
                                                                          21295
                                                                                      12
    8 essa_nagri_2
                           Essa Nagri-04
                                                         Gulshan Town
                                                                          39898
                                                                                      23
   9 garden_east_3
                           Garden East-11
                                                         Jamshed Town
                                                                          26868.
                                                                                      16
##
## 10 gillani_1
                           Gillani-06
                                                         Gulshan Town
                                                                          26334
                                                                                      15
## 11 gujjro_2
                           Gujro-04
                                                         East - Gadap
                                                                          41022.
                                                                                     24
                           Gulshan-e-Iqbal I-05
                                                         Gulshan Town
                                                                                      17
## 12 gulshan_iqbal_2
                                                                          28524
## 13 gulshan_2_1
                           Gulshan-e-Iqbal II-09
                                                         Gulshan Town
                                                                          29164.
                                                                                      17
## 14 gulzar-hijri_2
                           Gulzar-e-Hijri-12
                                                         Gulshan Town
                                                                          17194.
                                                                                      10
## 15 jamali_colony_1
                           Jamali Colony-08
                                                         Gulshan Town
                                                                          29834.
                                                                                      17
## 16 jamshed_quart_1
                           Jamshed Quarters-10
                                                         Jamshed Town
                                                                          25581.
                                                                                      15
## 17 jat_lines_3
                           Jat Line-08
                                                         Jamshed Town
                                                                          20356
                                                                                     12
## 18 manzoor 1
                           Manzoor Colony-02
                                                         Jamshed Town
                                                                          39892.
                                                                                     23
## 19 mehmoodabad_2
                                                         Jamshed Town
                           Mehmoodabad-05
                                                                          19597.
                                                                                      11
## 20 metro 1
                           Metroville
                                                         Gulshan Town
                                                                          53344.
                                                                                     31
## 21 pechs 1 3
                           P.E.C.H.S. I - 06
                                                         Jamshed Town
                                                                          27665.
                                                                                      16
## 22 pechs_2_1
                           P.E.C.H.S. II - 07
                                                         Jamshed Town
                                                                          19490.
                                                                                      11
## 23 pak_quart_1
                           Pakistan Quarters
                                                         Jamshed Town
                                                                          20832
                                                                                      12
## 24 pehalwan_2
                           Pehlwan Goth-10
                                                         Gulshan Town
                                                                          38526.
                                                                                      23
## 25 pib_colony_1
                           PIB Colony-03
                                                         Gulshan Town
                                                                          17201.
                                                                                     10
## 26 safooran_2
                                                         Gulshan Town
                                                                                     24
                           Safooran Goth-13
                                                                          40856.
## 27 soldier_bazar_3
                           Soldier Bazar-12
                                                         Jamshed Town
                                                                          24359
                                                                                      14
## # ... with abbreviated variable name 1: pop_per_segment
```

<sup>##</sup> The total number of segments that we would need for our sample according to the ## Sindh Health Department are 445

## Big Blocks Division

| ## | # 1 | A tibble: 27 x 2            |             |
|----|-----|-----------------------------|-------------|
| ## | # ( | Groups: uc [27]             |             |
| ## |     | uc                          | r           |
| ## |     | <chr></chr>                 | <int></int> |
| ## | 1   | Akhtar Colony-01            | 10          |
| ## | 2   | Azam Basti-03               | 16          |
| ## | 3   | Central Jacob Lines-09      | 11          |
| ## | 4   | Chanesar Goth-04            | 12          |
| ## | 5   | Civic Centre-02             | 24          |
| ## | 6   | Dalmia-07                   | 18          |
| ## | 7   | Delhi Mercantile Society-01 | 12          |
| ## | 8   | Essa Nagri-04               | 23          |
| ## | 9   | Garden East-11              | 16          |
| ## | 10  | Gillani-06                  | 15          |
| ## | 11  | Gujro-04                    | 24          |
| ## | 12  | Gulshan-e-Iqbal I-05        | 17          |
| ## | 13  | Gulshan-e-Iqbal II-09       | 17          |
| ## | 14  | Gulzar-e-Hijri-12           | 10          |
| ## | 15  | Jamali Colony-08            | 17          |
| ## | 16  | Jamshed Quarters-10         | 15          |
| ## | 17  | Jat Line-08                 | 12          |
| ## | 18  | Manzoor Colony-02           | 23          |
| ## | 19  | Mehmoodabad-5               | 11          |
| ## | 20  | Metroville                  | 31          |
| ## | 21  | P.E.C.H.S. I - 06           | 16          |
| ## | 22  | P.E.C.H.S. II - 07          | 11          |
| ## | 23  | Pakistan Quarters           | 12          |
| ## | 24  | Pehlwan Goth-10             | 23          |
| ## | 25  | PIB Colony-03               | 10          |
| ## | 26  | Safooran Goth-13            | 24          |
| ## | 27  | Soldier Bazar-12            | 14          |

### Final Blocks Selection

```
## # A tibble: 27 x 4
## # Groups:
               uc [27]
##
      Name
                                                 town
                                                               district
##
      <chr>
                    <chr>
                                                               <chr>
                                                 <chr>>
##
   1 akhtar_2
                    Akhtar Colony-01
                                                 Jamshed Town Karachi East
##
   2 azambasti_12
                    Azam Basti-03
                                                 Jamshed Town Karachi East
   3 jacob 2
                    Central Jacob Lines-09
                                                 Jamshed Town Karachi East
##
                                                 Jamshed Town Karachi East
##
   4 chanesar 8
                    Chanesar Goth-04
                    Civic Centre-02
##
  5 civic_12
                                                 Gulshan Town Karachi East
  6 shanti 12
                    Dalmia-07
                                                 Gulshan Town Karachi East
                    Delhi Mercantile Society-01 Gulshan Town Karachi East
## 7 dehli_9
   8 essa_20
                    Essa Nagri-04
                                                 Gulshan Town Karachi East
                    Garden East-11
                                                 Jamshed Town Karachi East
##
  9 garden_12
## 10 gillani_1
                    Gillani-06
                                                 Gulshan Town Karachi East
## 11 gujjro_6
                    Gujro-04
                                                 East - Gadap Karachi East
                    Gulshan-e-Iqbal I-05
                                                 Gulshan Town Karachi East
## 12 gulshan_11
## 13 gulshan_8
                    Gulshan-e-Iqbal II-09
                                                 Gulshan Town Karachi East
## 14 gulzar_3
                                                 Gulshan Town Karachi East
                    Gulzar-e-Hijri-12
                                                 Gulshan Town Karachi East
## 15 jamali_4
                    Jamali Colony-08
## 16 jamshed_9
                                                 Jamshed Town Karachi East
                    Jamshed Quarters-10
## 17 jat_10
                    Jat Line-08
                                                 Jamshed Town Karachi East
## 18 manzoor_18
                    Manzoor Colony-02
                                                 Jamshed Town Karachi East
## 19 mehmoodabad_8 Mehmoodabad-5
                                                 Jamshed Town Karachi East
## 20 metro 30
                    Metroville
                                                 Gulshan Town Karachi East
## 21 pechs 1
                    P.E.C.H.S. I - 06
                                                 Jamshed Town Karachi East
## 22 pechs_2_8
                    P.E.C.H.S. II - 07
                                                 Jamshed Town Karachi East
## 23 pak_7
                    Pakistan Quarters
                                                 Jamshed Town Karachi East
                                                 Gulshan Town Karachi East
## 24 pehalwan_5
                    Pehlwan Goth-10
## 25 pib_2
                    PIB Colony-03
                                                 Gulshan Town Karachi East
## 26 safooran_11
                                                 Gulshan Town Karachi East
                    Safooran Goth-13
## 27 solider_4
                    Soldier Bazar-12
                                                 Jamshed Town Karachi East
```

### Final Blocks Selection

```
## # A tibble: 27 x 4
## # Groups:
               uc [27]
      name
##
                                                   t.own
                                                                district
##
      <chr>
                                                   <chr>
                                                                <chr>
                      <chr>>
##
   1 akhtar_2_1
                      Akhtar colony-01
                                                   Jamshed Town Karachi East
##
   2 azambasti_12_4
                      Azam Basti-03
                                                   Jamshed Town Karachi East
   3 jacob 2 2
                      Central Jacob Lines-09
                                                   Jamshed Town Karachi East
##
                                                   Jamshed Town Karachi East
##
  4 chanesar 8 7
                      Chanesar Goth-04
## 5 civic_12_7
                      Civic Centre-02
                                                   Gulshan Town Karachi East
## 6 shanti 12 3
                      Dalmia-07
                                                   Gulshan Town Karachi East
## 7 dehli_9_8
                      Delhi Mercantile Society-01 Gulshan Town Karachi East
## 8 essa_20_5
                      Essa Nagri-04
                                                   Gulshan Town Karachi East
                      Garden East-11
                                                   Jamshed Town Karachi East
##
  9 garden_12_5
## 10 gillani_1_3
                      Gillani-06
                                                   Gulshan Town Karachi East
## 11 gujjro_6_1
                      Gujro-04
                                                   East-Gadap
                                                                Karachi East
## 12 gulshan_11_2
                      Gulshan-e-Iqbal I-05
                                                   Gulshan Town Karachi East
## 13 gulshan_8_1
                      Gulshan-e-Iqbal II-09
                                                   Gulshan Town Karachi East
## 14 gulzar_3_6
                                                   Gulshan Town Karachi East
                      Gulzar-e-Hijri-12
                                                   Gulshan Town Karachi East
## 15 jamali_4_3
                      Jamali Colony-08
## 16 jamshed_9_8
                      Jamshed Quarters-10
                                                   Jamshed Town <NA>
## 17 jat_10_3
                      Jat Line-08
                                                   jamshed town Karachi East
## 18 manzoor_18_2
                      Manzoor Colony-02
                                                   Jamshed Town Karachi East
## 19 mehmoodabad_8_4 Mehmoodabad-5
                                                   Jamshed Town Karachi East
## 20 metro 30 4
                      Metroville
                                                   Gulshan Town Karachi East
## 21 pechs 1 1
                      P.E.C.H.S. I - 06
                                                   Jamshed Town Karachi East
## 22 pechs_2_8_7
                      P.E.C.H.S. II - 07
                                                   Jamshed Town Karachi East
## 23 pak_7_4
                      Pakistan Quarters
                                                   Jamshed Town <NA>
## 24 pehalwan_5_1
                      Pehlwan Goth-10
                                                   Gulshan Town Karachi East
## 25 pib_2_2
                      PIB Colony-03
                                                   Gulshan Town Karachi East
## 26 safooran_11_2
                                                   Gulshan Town Karachi East
                      Safooran Goth-13
## 27 solider_4_8
                      Soldier Bazar-12
                                                   Jamshed Town Karachi East
```

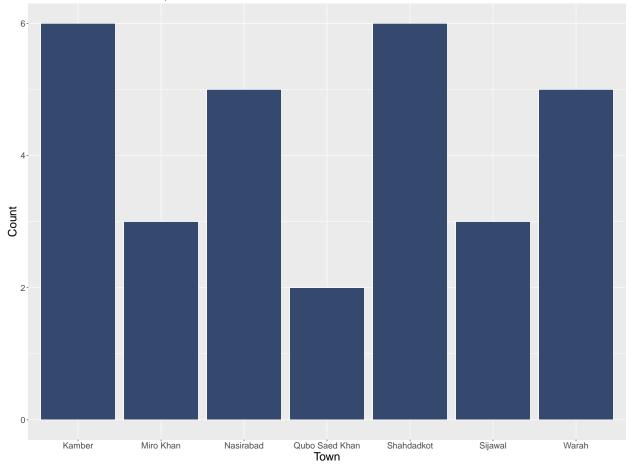
## Kambar District

| ## |    | district | zm_ucs             | town           | pop_health |
|----|----|----------|--------------------|----------------|------------|
| ## | 1  | Kambar   | Jean Abro          | Kamber         | 38,231     |
| ## | 2  | Kambar   | Qambar-1           | Kamber         | 35,610     |
| ## | 3  | Kambar   | Meerpur            | Warah          | 38,574     |
| ## | 4  | Kambar   | Muradi             | Nasirabad      | 33,142     |
| ## | 5  | Kambar   | Mastoi             | Sijawal        | 35,332     |
| ## | 6  | Kambar   | Naseerabad         | Nasirabad      | 40,899     |
| ## | 7  | Kambar   | Gaibi Dero         | Kamber         | 34,801     |
| ## | 8  | Kambar   | Seelra             | Shahdadkot     | 33,430     |
| ## | 9  | Kambar   | Shahdadkot-3       | Shahdadkot     | 30,002     |
| ## | 10 | Kambar   | Aitbar Khan        | Shahdadkot     | 33,179     |
| ## | 11 | Kambar   | Nasirabad- Lakha   | Nasirabad      | 34,802     |
| ## | 12 | Kambar   | Shahdadkot-1       | Shahdadkot     | 33,817     |
| ## | 13 | Kambar   | Boohar             | Kamber         | 35,499     |
| ## | 14 | Kambar   | Dera               | Nasirabad      | 33,774     |
| ## | 15 | Kambar   | Gaji Khuhawar      | Warah          | 37,588     |
| ## | 16 | Kambar   | Qambar-2           | Kamber         | 36,240     |
| ## | 17 | Kambar   | Dhinghano Mahessar | Sijawal        | 32,147     |
| ## | 18 | Kambar   | Thoof chosool      | Sijawal        | 35,145     |
| ## | 19 | Kambar   | Mirokhan           | Miro Khan      | 40,933     |
| ## | 20 | Kambar   | Abad               | Warah          | 33,666     |
| ## | 21 | Kambar   | Hazarwah           | Qubo Saed Khan | 28,288     |
| ## | 22 | Kambar   | Lalu raunk         | Warah          | 39,602     |
| ## | 23 | Kambar   | Karira             | Miro Khan      | 36,860     |
|    | 24 | Kambar   | 0                  | Qubo Saed Khan | 33,774     |
| ## | 25 | Kambar   | Dost Ali           | Kamber         | 34,118     |
| ## | 26 | Kambar   | Warah- Warah       | Warah          | 75,954     |
|    | 27 | Kambar   | Jamali             | Shahdadkot     | 32,431     |
|    | 28 | Kambar   | Bahram             | Miro Khan      | 44,745     |
| ## | 29 | Kambar   | Miandad Chinjni    | Nasirabad      | 37,201     |
| ## | 30 | Kambar   | Shahdadkot-2       | Shahdadkot     | 36,150     |

```
## # A tibble: 7 x 3
## # Groups:
               district, town [7]
##
     district town
##
     <chr>
              <chr>>
                              <int>
## 1 Kambar
              Kamber
                                 11
## 2 Kambar
              Miro Khan
                                  4
## 3 Kambar
              Nasirabad
                                  5
              Qubo Saed Khan
## 4 Kambar
                                  3
## 5 Kambar
              Shahdadkot
                                  6
## 6 Kambar
                                  4
              Sijawal
## 7 Kambar
              Warah
                                  6
```

### Kambar District

Town-wise division of sample



"