Geographic Classification and Geo-coding in Kenya

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Content

1. **Introduction**
2. **Hierarchy of geographic areas**
   a) Administrative
   b) Urban/rural
   c) Political
   d) Enumeration Areas
   e) Statistical
3. **Geo coding System**
Kenya Geographic Areas

Collection Geography

Dissemination Geography

Administrative Areas

Statistical Areas
Introduction

- Census geography describes the subdivision of the country into geographical areas for the purposes of the census.

- There are two major uses of a census geography:
  - Facilitate the organization and management of the census itself;
  - Provide an appropriate framework for the publication and dissemination of small area census statistics to users.
Introduction cont’ …

- Obligation of the Kenya National Bureau of Statistics is to provide the most complete and accurate population figures for evidence based planning and policy formulation.

- Statistical information from KNBS are also used in:
  - allocation of public devolved funds to various levels of geography (CDF, County Governments among others) authorized by the constitution,
  - Administration of social and economic trends in the public and private programs.
<table>
<thead>
<tr>
<th>Type of need and use</th>
<th>Description and Geography</th>
<th>Geography</th>
<th>Examples of Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation of devolved resources</td>
<td>• Population census data is main criteria for Allocation of County Finances at all levels</td>
<td>✔ County</td>
<td>• CRA</td>
</tr>
<tr>
<td>Political</td>
<td>• Delineation, adjustment of boundaries of political Units i.e. Constituencies and County Wards</td>
<td>✔ Constituencies and county wards</td>
<td>• IEBC</td>
</tr>
<tr>
<td>Administrative</td>
<td>• Creation of new administrative units</td>
<td>✔ Sub counties, divisions, locations and sub locations</td>
<td>• National Government</td>
</tr>
</tbody>
</table>
| Research | • Sampling, creating sampling frames.  
• Background information to research studies | ✔ Enumeration Area | • KNBS  
• Research Institutions  
• Students |
| M&E | • Development of indicators. Population Census data is used as denominator in calculations of many socio-economic indicators such as, in Education -Net & Gross Enrollment Rates in schools, universities, Literacy rates; In Health – immunization coverage, disease prevalence rates e.g. HIV, malaria, Maternal mortality rates; in Population wellbeing – poverty incidence, levels | ✔ National  
✔ County  
✔ Sub Counties  
✔ Sub locations | • Government- MDAs e.g. education, health, planning  
• KNBS  
• UN Agencies |
| Planning | • General Project planning  
• Provision of services – water, health  
• Urban (spatial) Planning (Urban) | ✓ National  
✓ County  
✓ Urban  
✓ Rural | • MDAs, NGOs, Investors |
| Business/Commerce | • Determining import quotas e.g. imports to cover shortfalls in local production of key crops such as sugar, maize etc or drugs  
• Marketing of products & services e.g. MPESA | ✓ National | • KSB, NCPB, Ministries of Agriculture, Trade,  
• Private business entities |
| Environmental Impact Assessments (EIAs) | • Determining populations affected by impacts of new projects either for compensation or other mitigation measures | ✓ All levels of geography | • NEMA  
• Investors e.g. mining companies |
| • General awareness | • Knowledge, Curiosity | ✓ All levels | • Public/Citizens |
Hierarchy of Geographic Areas

- All these needs are recognized under the hierarchal order of diverse geographic areas;
  - Administrative
  - Urban /Rural
  - Political
  - Enumeration Area
  - Statistical

- Forms the framework for the collection, tabulation and presentation of data from its decennial censuses, and intercensal surveys
Hierarchy of Geographic Areas ....

- **Administrative boundaries**
  - In 2009 census Kenya was administratively divided into six levels: Province, District, Division, Location and sub location.

- **Political boundaries**
  - Politically Kenya had 210 constituencies and 3,700 civic wards

- **Enumeration Area (EA) Boundaries**
  - This can be the size of a village of half the village
  - Before a population census the entire country is delineated into EAs to be covered by an enumerator to ensure complete coverage
Hierarchy of Geographic Areas ....

- EAs delineated from October 2006 to July 2009 for the 2009 Census.
- Verification of EAs done in selected Districts.
- On average an EA consists of 100 households.
- The public and academic institutions also use them when conducting surveys and researches.

**Statistical Boundaries**

- After every population census a Master Sampling Frame is created for the household based surveys to generate official statistics.
- The current frame was created after the 2009 Census.
- This is the largest sampling frame ever in Kenya with a total of 5,360 clusters.

Hierarchy of geographic boundaries

Collection Geography
- Enumeration Area
- Sub location
- Location
- Division
- District
- Constituency
- Urban/Rural
- Province
- National

Dissemination Geography
- National
- Province
- Urban
- Constituency
- District
- Division
- Location
- Sub location
### 2009 Collection Geography

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provinces</td>
<td>(8)</td>
</tr>
<tr>
<td>Districts</td>
<td>(158)</td>
</tr>
<tr>
<td>Divisions</td>
<td>(635)</td>
</tr>
<tr>
<td>Locations</td>
<td>(2,735)</td>
</tr>
<tr>
<td>Sub locations</td>
<td>(7,149)</td>
</tr>
<tr>
<td>EA</td>
<td>(96,252)</td>
</tr>
<tr>
<td>Constituencies</td>
<td>(210)</td>
</tr>
<tr>
<td>Urban</td>
<td>(215)</td>
</tr>
</tbody>
</table>
158 Census Districts
## 2019 Census Collection Geography

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counties</td>
<td>47</td>
</tr>
<tr>
<td>Constituencies</td>
<td>290</td>
</tr>
<tr>
<td>Sub Counties</td>
<td>290</td>
</tr>
<tr>
<td>Divisions</td>
<td>*</td>
</tr>
<tr>
<td>County wards</td>
<td>1450</td>
</tr>
<tr>
<td>Locations</td>
<td>*</td>
</tr>
<tr>
<td>Sub locations</td>
<td>*</td>
</tr>
<tr>
<td>EA</td>
<td>*</td>
</tr>
</tbody>
</table>

* means the areas are likely to change before the 2019 census

Counties are legal Areas
Enumeration Area Map
Urban/Rural Boundaries

- Census data in Kenya is disaggregated by rural and urban.
- Urban areas refer to areas with increased density of human – created structures in comparison to the areas surrounding it and has a population of 2000 and above.
- Urban areas include the following: cities, municipalities, town councils and urban councils.
Urban Boundaries

- During the 2009 Census, there were 215 urban areas. These were under the then Ministry of Local Government.
  - Cities 3
  - Municipalities 41
  - Town Councils 55
  - Others 116

- These were utilized as collection and dissemination geography for urban areas
Urban Geography Boundaries
Statistical Boundaries
Population Density by Sub location
Urban and Rural Sub locations

Introduction & Background

1.05 Rural and Urban Sub-Locations

Republic of Kenya: 1,4,000,000


KNBS
KENYA NATIONAL BUREAU OF STATISTICS
Keeping you informed
Poverty Incidence
Census Geo coding System

- All the geographic areas are managed by a unique geo coding system having 20 digits
  - Province 2 digits
  - District 2 digits
  - Division 2 digits
  - Location 2 digits
  - Sub location 2 digits
  - EA 3 digits type 1 digit status 1 digit
  - Constituency 3 digits
  - Ward 2 digits
Thank You