Regional Committee of United Nations Global Geospatial Information Management for Africa

Workshop on Integration of Geospatial and Statistical Information

Manual on Geocoding of census data in Africa

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UN-GGIM: AFRICA
UNITED NATIONS INITIATIVE ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT

Structure of the Manual on Geocoding of Census Data in Africa

Four Chapters

An Overview of the Concept of Geocoding;
Geocoding Population and Housing Censuses (PHC)
in Africa; Geocoding According to Census Thematic
Areas; Integrating Geocoding into Census Data
Analysis by Thematic Areas

Number of Pages

The document contain over 200 pages consisting of
text, graphs, charts, tables and figures

Funding

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Duration of Consultancy

Three Months

UNECA Division and Section

African Centre for Statistics, Geospatial Information
Management Section (GiMs)

Manual on Geocoding of Census Data in Africa

Initiatives of UNECA towards strengthening national geospatial information management for the 2030 Agenda
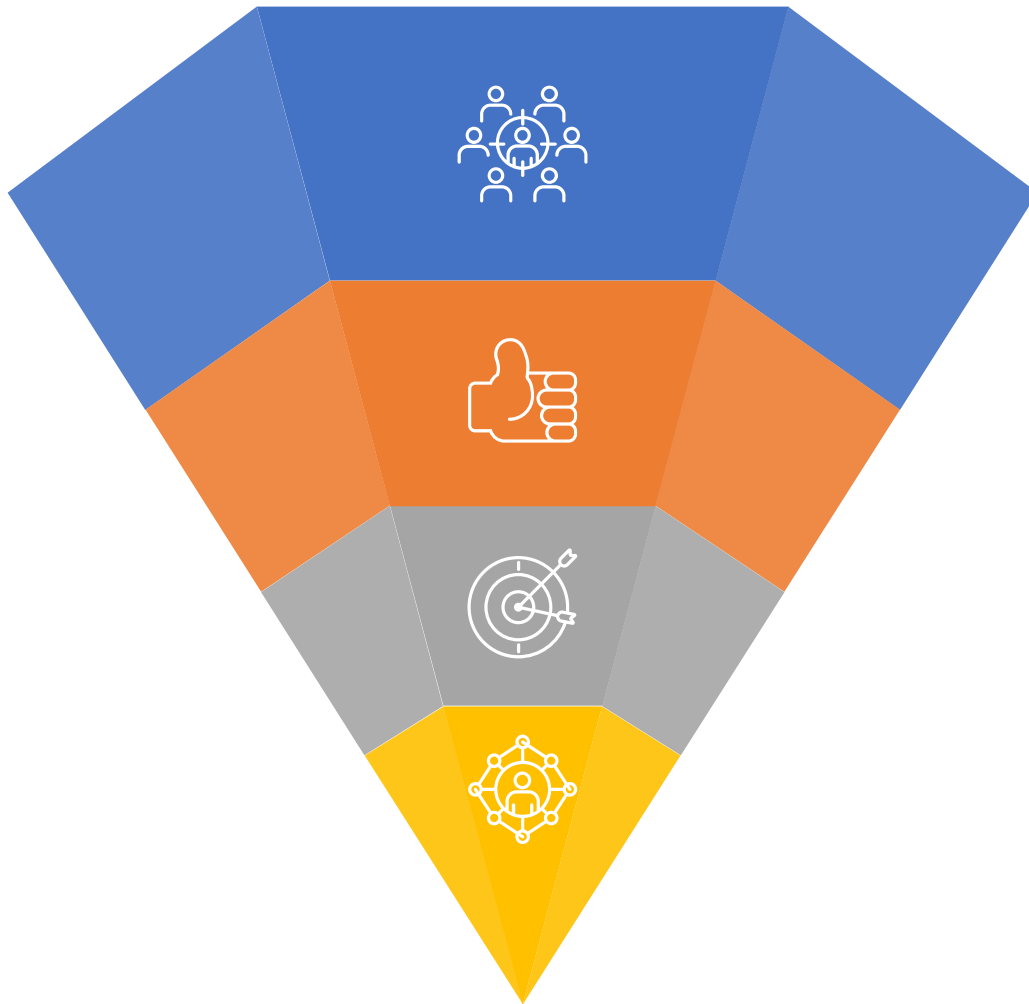
ATTENTION
Introduction: An Overview of the Concept of Geocoding

INTEREST
Geocoding Population and Housing Censuses (PHC) in Africa

DESIRE
Geocoding According to Census Thematic Areas

ACTION
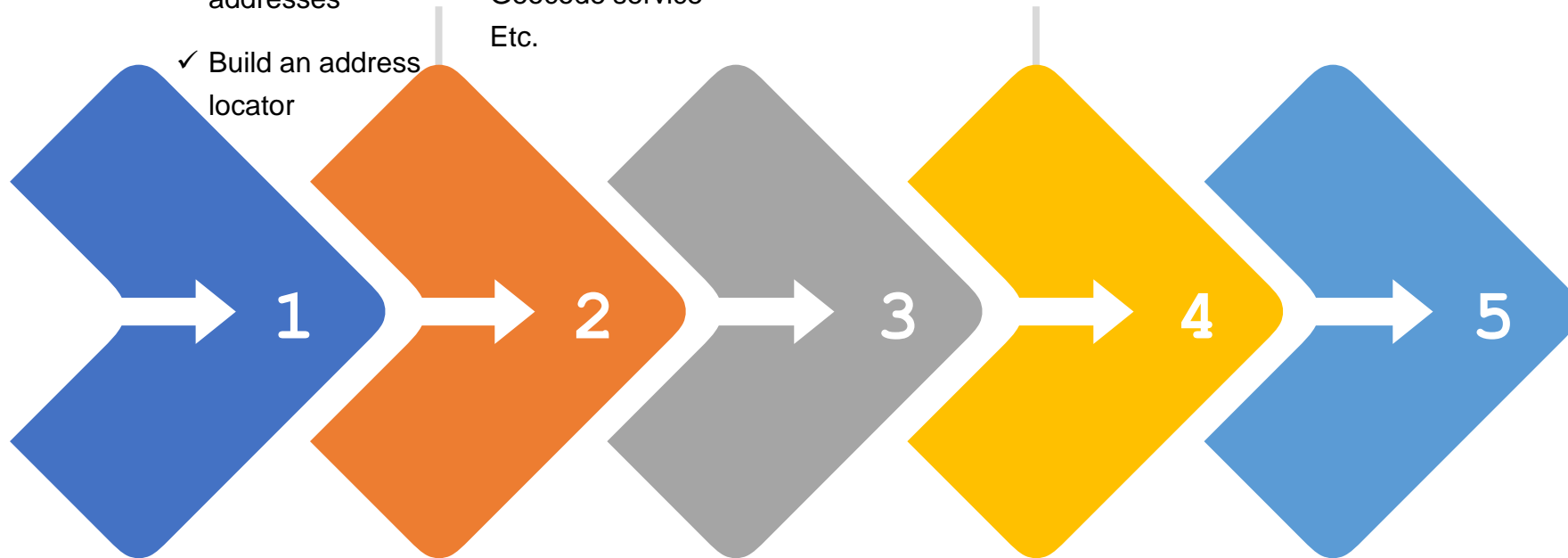Integrating Geocoding into Census Data Analysis by Thematic Areas

Chapter 1: An Overview of the Concept of Geocoding

Population and Housing Censuses

CONCEPT OF GEOCODING

✓ Address

✓ Formats of addresses

✓ Build an address locator

✓ Sharing your address locator

✓ Geocode service Etc.

GEOCODING AND THE GLOBAL STATISTICAL GEOSPATIAL FRAMEWORK

1 **2** **3** **4** **5**

Principle 1: Use of fundamental geospatial infrastructure and geocoding
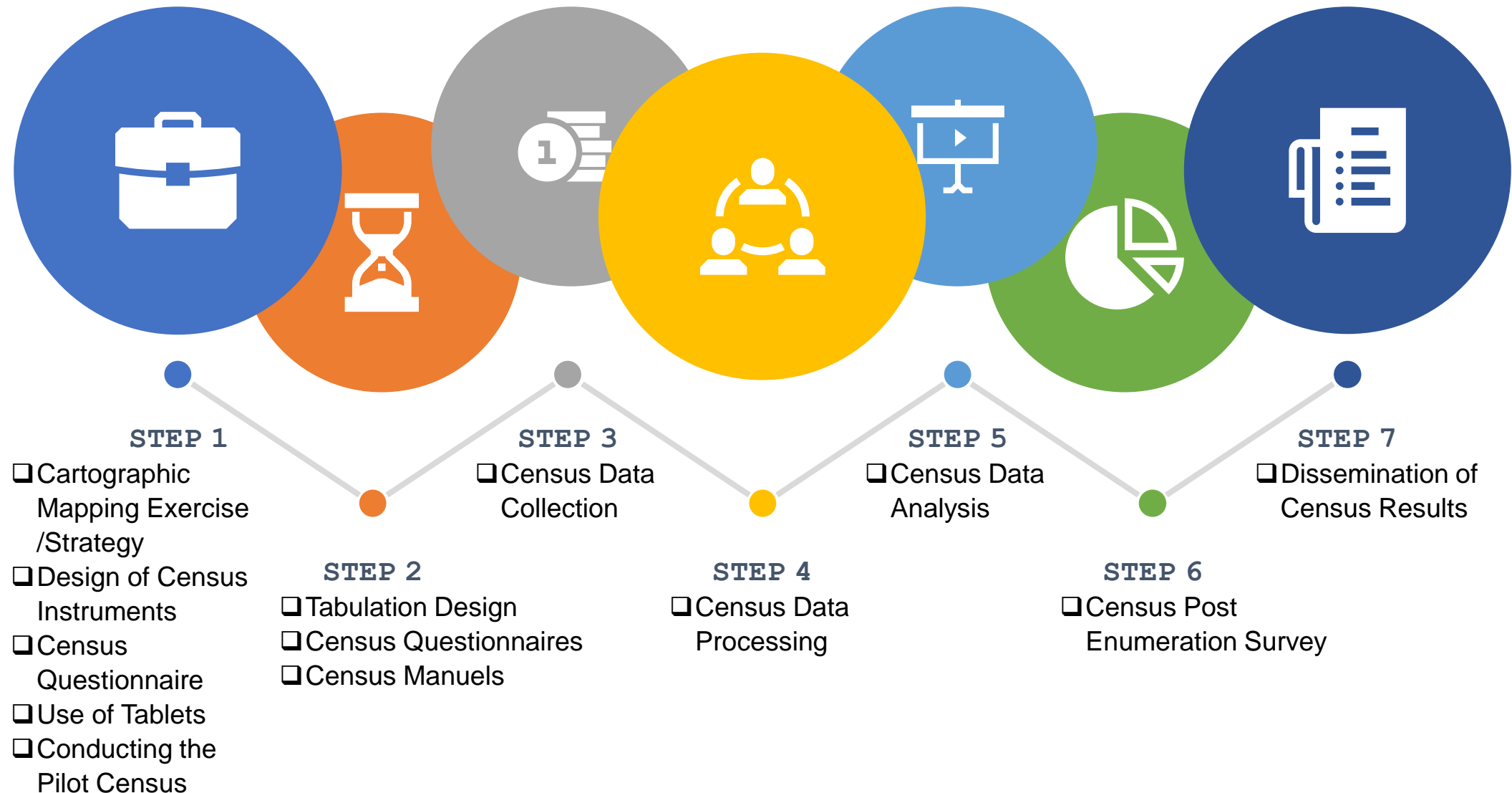
Principle 2: Geocoded unit record data in a data management environment

Principle 3: Common geographies for dissemination of statistics

Principle 4: Statistical and geospatial interoperability Data, Standards, Processes, and Organizations

Principle 5: Accessible and usable geospatially enabled statistics

Chapter 2: Integrating Geocoding into the Chronogram of Census Activities

STEP 1
- ❑Cartographic Mapping Exercise /Strategy
- ❑Design of Census Instruments
- ❑Census Questionnaire
- ❑Use of Tablets
- ❑Conducting the Pilot Census

STEP 2
- ❑Tabulation Design
- ❑Census Questionnaires
- ❑Census Manuels

STEP 3
- ❑Census Data Collection

STEP 4
- ❑Census Data Processing

STEP 5
- ❑Census Data Analysis

STEP 6
- ❑Census Post Enumeration Survey

STEP 7
- ❑Dissemination of Census Results

Chapter 3: Geocoding According to Census Thematic Areas

Poverty and Durables
Variables concerned: -Sex, age, place of residence etc.

Population Structure and Population Distribution
Variables concerned: - Relationship to household head, Sex, age, marital status, place of residence, ethnic affiliation, religious affiliation, fertility

Nuptiality and Fertility
Variables concerned: Age and Sex, Children ever born residing with mother, Children ever born residing elsewhere, Children dead, Place of current residence, Literacy status, educational attainment, economic activity status

Mortality
Variables concerned: Age and sex, Deaths in last 12 months, Maternal deaths, Children dead/children ever born per woman, Place of current residence, Literacy status, educational attainment, economic activity status

Migration and Urbanization

Chapter 3: Geocoding According to Census Thematic Areas

Non-Monetary Poverty

Variables concerned : -Place of residence, Type of housing unit, Years since construction, Number of rooms, Mode of tenure, Co-residence with domestic animals, Material for walls, Material for major part of ceiling, etc.

Housing Conditions

Variables concerned : -Place of residence, Relationship to head of household, age, sex, marital status, educational attainment, economic activity (of household head), Type of housing unit, Years since construction, Number of rooms, Mode of tenure, Co-residence with domestic animals, Material for walls, Material for major part of ceiling,

Education and Literacy

Variables concerned: -Sex, age, place of residence, literacy, current school attendance, educational level attained, economic activity

Economic Characteristics

Variables concerned: -Sex, age, place of residence, economic activity status, employment status, literacy, current school attendance, educational level attained, household composition

Children, Adolescents and Youth

Variables concerned: -Sex, age, relationship to household head, place of residence, literacy, school attendance, educational level attained, economic activity Etc.
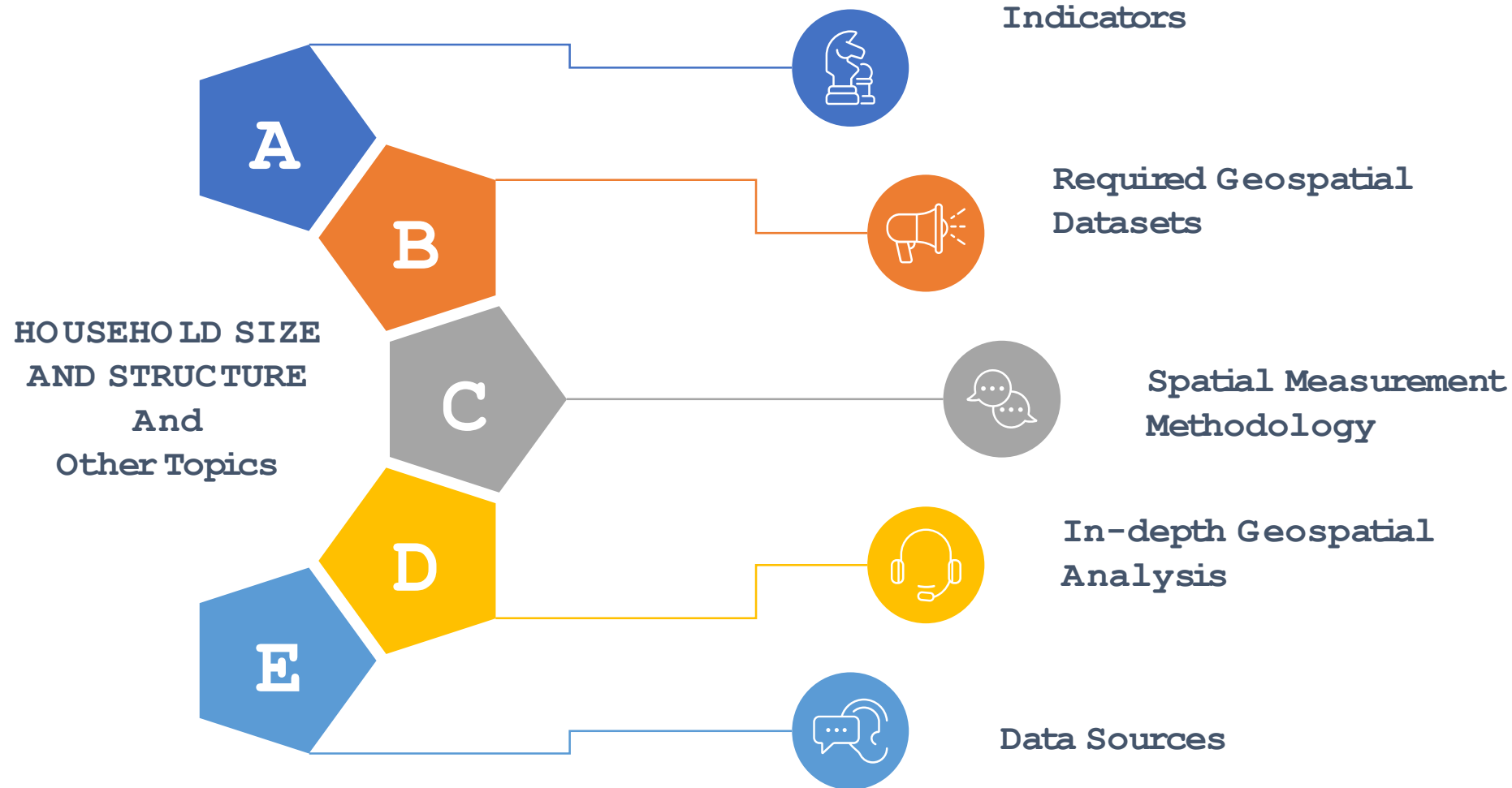
Situation of Women

Variables concerned: -Sex, age, relations to household head, place of residence, religious affiliation, languages spoken, literacy, school attendance, educational level attained, economic activity, household and housing characteristics
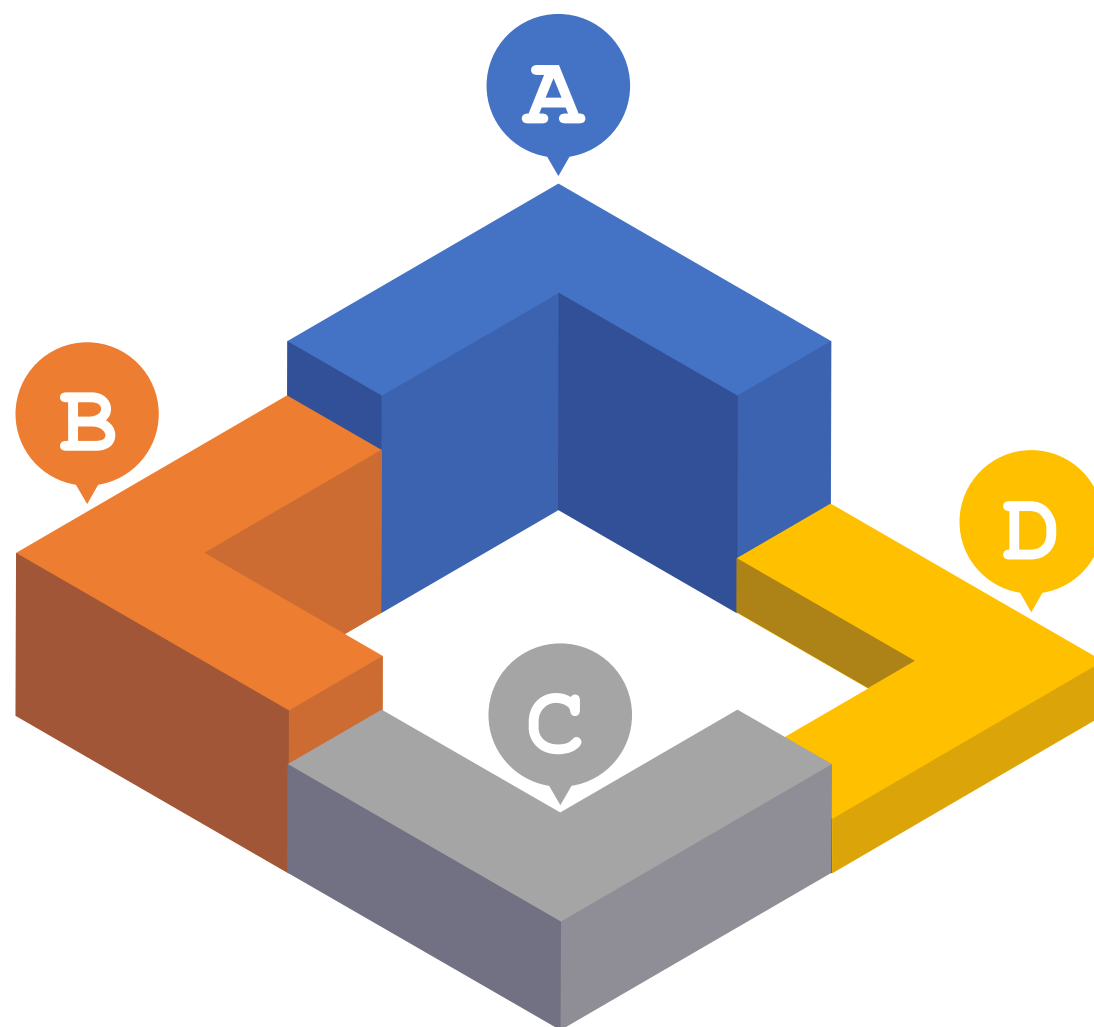
Population Projection and LIFE Tables:
Variables concerned: -Age, sex, Place of residence, indicators on fertility, mortality, migration, economic activity, householdheadship rates

Chapter 4: Integrating Geocoding into Census Data Analysis by Thematic Areas

A

B

C

D

E

HOUSEHOLD SIZE AND STRUCTURE
And
Other Topics

Indicators

Required Geospatial Datasets

Spatial Measurement Methodology

In-depth Geospatial Analysis

Data Sources

Chapter 5: Dissemination of Census Geocoded Datasets

- A Web GIS
- B Geoportals
- C Dashboards
- D Story Maps

THANKS