Population Distribution: Classification of Residence

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Classification of Residence

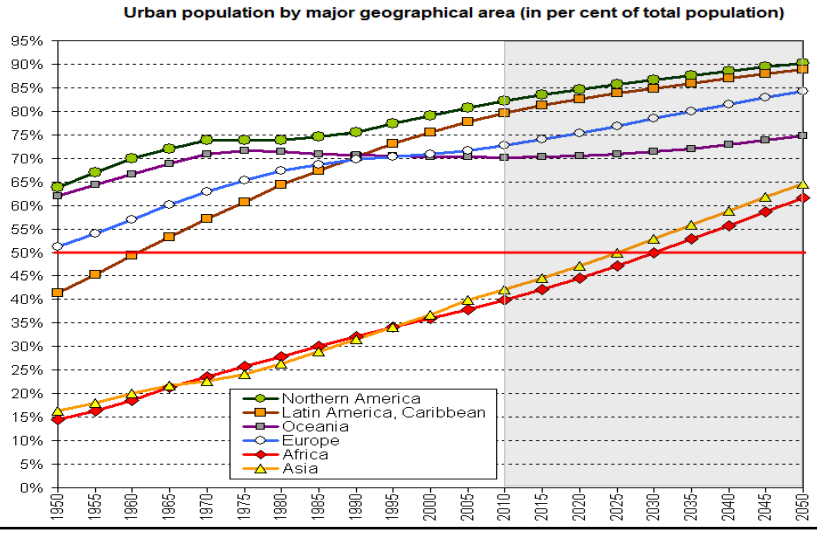
- In this lecture, we are going to discuss the distribution of the population by residence.
- Classification of population by residence means classifying population by type and nature of their place of residence, usually urban and rural areas.

Importance of Urban/Rural Classification

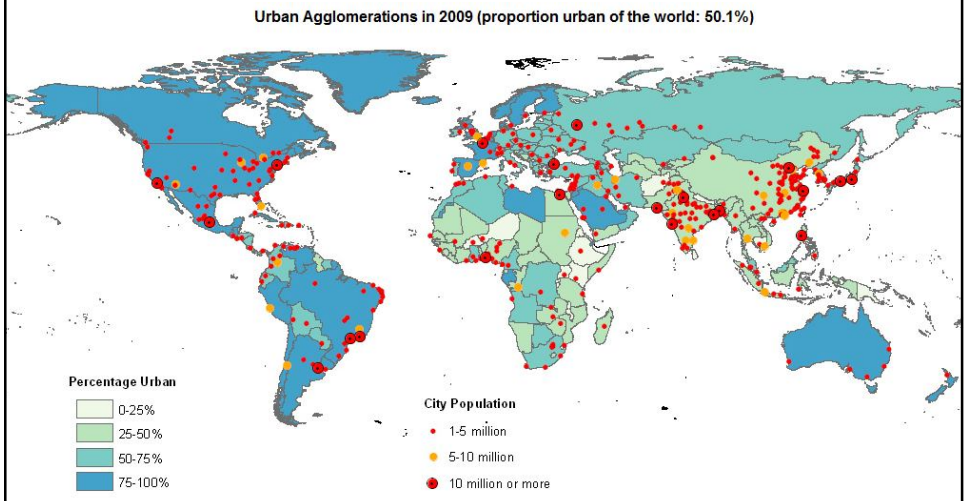
Why classifying population by residence is important in the study of demography?

- Because demographic indicators and measures, theoretically, vary according to the type of place of residence.
  - Fertility rates vary according to type of residence
  - Morbidity rates vary according to type of residence
  - Mortality rates vary according to type of residence
  - Migration rates vary according to type of residence
- Also because the definition of type of residence varies between countries

World Urbanization (1950-2050)



World Urbanization (2009)



Defining Urban: A Problematic Issue

Defining Urban: A Problematic Issue

- The working definitions of "*urban*" and "*rural*" vary greatly, not only according to nation, but also according to organization and research discipline.
- Urban settlements have been defined, for example, on the basis of an *urban culture*, *administrative functions*, *percentage of people in nonagricultural occupations*, and *size* or *density of population*.
- Rural areas are often defined as a residual category—that is, "areas not classified as urban."
- But they may also be subdivided by criteria that vary according to *nation*, *organization*, and *discipline*.
- Another problem also arises from the change of urban definition over time.

International Standards and Definition

United Nations Recommendations

- The United Nations is working for more than 40 years to develop a standard definition of urban/rural statistics.
- The major purpose of this effort is to assist countries in both planning for and developing the content of censuses.
- Another goal is to improve international compatibility through the use of standardized definitions and classification.
- The United Nations suggests that countries define urban areas as localities with a population of 2000 or more and rural areas as localities with a population of fewer than 2000..

United Nations Recommendations (Cont'd)

- However, the United Nations it notes that some countries may also wish to consider defining urban areas in other ways, such as in terms of *administrative boundaries* or *built-up areas* or in terms of *functional areas*.
- Moreover, the UN advises that countries may want to develop *typologies of urban locations* based on additional criteria, such as market towns, industrial areas, and central city or suburban.
- Generally, the UN encourages countries to classify the population according to small geographical areas or primary units.

International Standards and Definition

National Practices

- Despite the UN's attempts to bring some degree of international standardization to the urban-rural classification, the application of these standards vary substantially from one country to another.
- Individual countries usually design and implement criteria and definitions that address the administrative and policy needs of that country.
- Only one point of agreement between all countries which is defining rural as the *residual* after defining urban their own way.

International Standards and Definition

National Practices (Cont'd)

- The conclusion is, a majority of nations ignore the United Nations recommendations on urban-rural classifications and use their own definitions and standards.

International Standards and Definition

National Practices (Cont'd)

- Most countries use one of five schemes when designating urban areas:
  1) Minimum population size.
  2) A combination of population density and population size.
  3) Population size and the primary economic activity.
  4) Official decree of the national government.
  5) Defined urban characteristics

International Standards and Definition

National Practices (Cont'd)

- Most countries use one of five schemes when designating urban areas:
- The **first** and most widely used is simply establishing a minimum population size that acts as a threshold (cut-off point) requirement for a town or city to qualify as an urban area.
- This cut-off point vary from country to another.
- Angola, for example, classifies any town with more than 2000 people as an urban area, while in Italy the requirement is 10,000 and in Nepal it is 9000.

International Standards and Definition

National Practices (Cont'd)

- There are other cases where population density is used in combination with population size to define an urban area.
- The Philippines requires that cities and municipalities have at least 1000 persons per square mile as well as a population minimum of 2500.
- In India, an urban area needs to have at least 5000 people and a population density of 1000 per square mile to qualify.

International Standards and Definition

National Practices (Cont'd)

- Another popular classification system uses both population size and the primary economic activities of the area to determine if it is urban.
- In India, an urban area needs to have at least 5000 people and a population density of 1000 per square mile to qualify.
- For example, Estonia designates areas as urban on the basis of population size and the predominance of nonagricultural workers and their families.
- In Botswana, the standard is a population of at least 5000, where 75% of the economic activity is nonagricultural.

International Standards and Definition

National Practices (Cont'd)

- Austria requires a commune to have 2000 persons and 85% of the active population to be engaged in nonagricultural/nonforestry work.
- These types of classification systems are often seen in nations that link the concept of rural status to the activity of farming.

International Standards and Definition

National Practices (Cont'd)

- There are several cases where cities and towns are legally defined or established as urban by official decree of the national government.
- Guatemala, Bulgaria, and the Republic of Korea are examples of nations that use this system.
- The exact requirements for urban designation vary greatly and frequently involve non demographic and noneconomic factors.

International Standards and Definition

National Practices (Cont'd)

- Finally, many nations have established defined urban characteristics that an area must possess in addition to population size in order to qualify for urban status.
- Chile, for example, states that a population center must have "certain public and municipal services" in order to attain urban status.
- Cuba requires an urban place to have a population of at least 2000.
- However, an area of lesser population can qualify if it has paved streets, street lighting, piped water, sewage, a medical center, and educational facilities.

Measures of Place of Residence

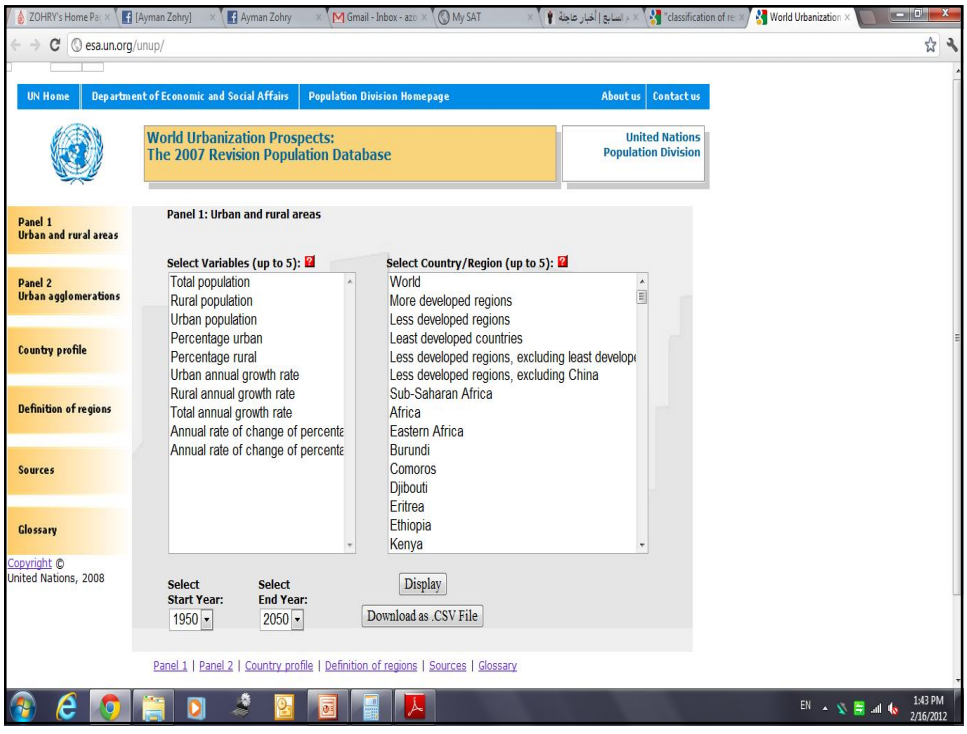
- **Percentage Urban**
  - Urban population as a percentage of the total population
- **Percentage Rural**
  - Rural population as a percentage of the total population
- **Urban Annual Growth Rate**
  - Average exponential rate of growth of the urban population over a given period. It is calculated as $\ln(UPt/UP0)/n$ where n is the length of the period and UP is the urban population.
- **Rural Annual Growth Rate**
  - Average exponential rate of growth of the rural population over a given period. It is calculated as $\ln(RPt/RP0)/n$ where n is the length of the period and RP is the rural population.

Example: Pakistan (1980-2010)

Year	Total population	Rural population	Urban population	Percentage urban	Percentage rural	Urban Annual Growth rate	Rural Annual Growth rate	Total Annual Growth rate
1980	79 222	56 988	22 234	28.1	71.9	4.52	3.27	3.63
1985	95 005	67 127	27 878	29.3	70.7	4.29	3.12	3.47
1990	112 991	78 443	34 548	30.6	69.4	3.27	2.09	2.46
1995	127 766	87 090	40 676	31.8	68.2	3.26	2.05	2.44
2000	144 360	96 476	47 884	33.2	66.8	2.82	1.30	1.82
2005	158 081	102 945	55 135	34.9	65.1	3.04	1.17	1.84
2010	173 351	109 158	64 192	37.0	63.0	3.27	1.05	1.90

Where to Find Data on Place of Residence?

- World Urbanization Prospects
- http://esa.un.org/unup/
- Prepared and updated by the Population Division of the United Nations



Next Week

- **February 26: Age and Sex Composition**
- **Readings:**
- Siegel, J. & Swanson, D. Chapter 7 ; pp :125-174 .

- **Assignments**:
- Select five countries of your choice from the World Urbanization Prospects website.
- Produce their associated data on total population, population by urban rural, percentages of urban/rural population.
- Analyze the tables you produced in a minimum of one page of text.