

Question 2

URBANIZATION INDICATORS FOR SELECTED COUNTRIES

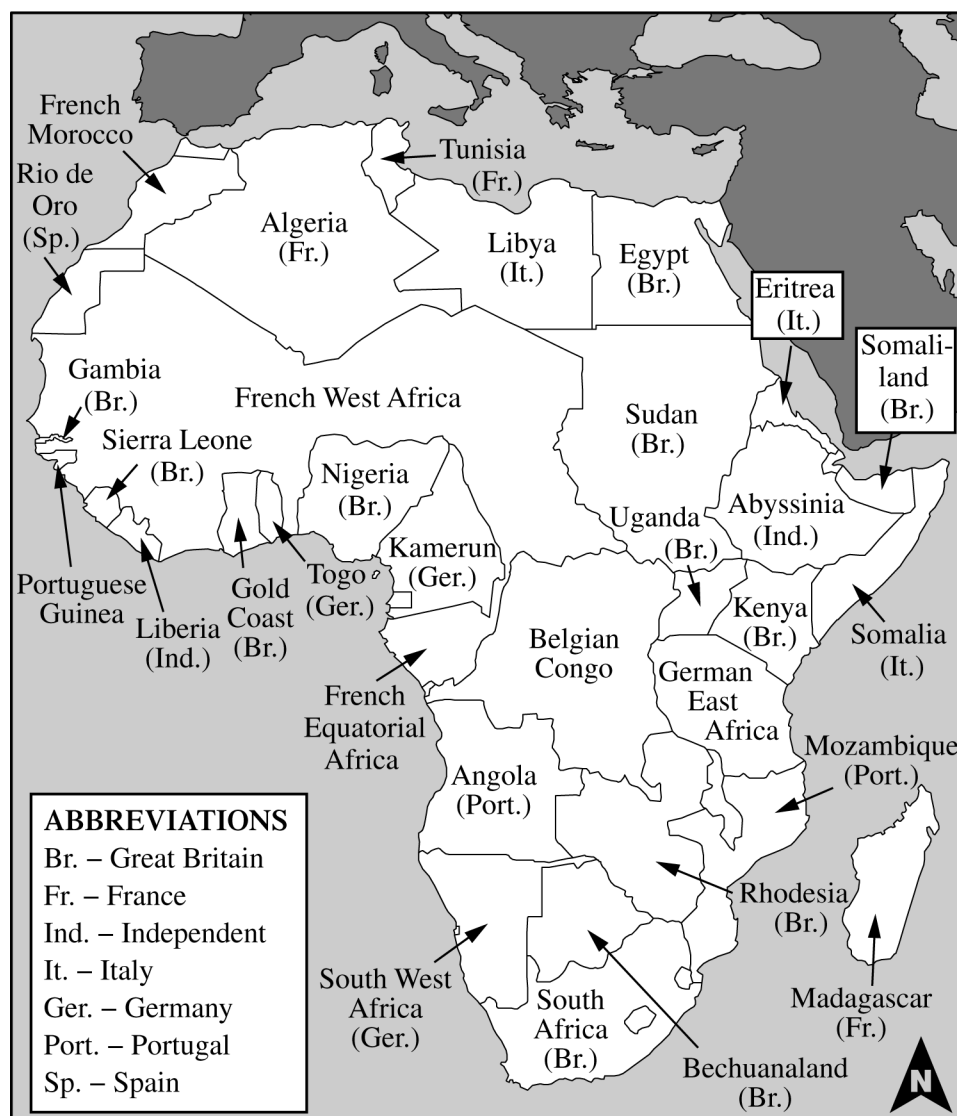
Country	Percent Urban Population	Annual Urban Population Growth Rate	Percent of Urban Population with Safe Drinking Water	Percent of Urban Population with Access to Electricity	Percent of Rural Population with Access to Electricity	Percent of Urban Population Living in Squatter Settlements
Afghanistan	25%	3%	78%	98%	79%	63%
Australia	86%	2%	99%	100%	100%	0%
Bangladesh	36%	3%	45%	94%	69%	55%
Germany	77%	< 1%	100%	100%	100%	0%
Vietnam	35%	3%	99%	100%	100%	27%

Source: World Bank, United Nations Development Programme

2. Urbanization is associated with economic development. On average, living standards are higher in urban areas than in rural areas. However, there are many differences among the world's cities.
- Using numerical data to support your answer, identify the least urbanized country in the table shown.
 - Using the data shown in the table, explain ONE difference in urbanization patterns between Australia and Bangladesh.
 - Describe ONE common characteristic of the built environment of squatter settlements in developing countries.
 - Explain ONE positive health effect likely to result from improved access to electricity in urban areas.
 - Explain ONE reason why individuals in less developed countries are likely to move to cities, contributing to the global trend of rural to urban migration.
 - Explain ONE likely effect of rural to urban migration on the economy of a developing country.
 - Explain a limitation of the data shown in the table in illustrating challenges to urban sustainability.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

Question 3

MAP 1: AFRICA, POLITICAL BOUNDARIES IN 1890

Question 2: One Stimulus**7 points**

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- (A)** Using numerical data to support your answer, identify the least urbanized country in the table shown. **1 point**

Accept the following:

- A1. Afghanistan's population is the least urban, with 25% urbanized.

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- (B)** Using the data shown in the table, explain ONE difference in urbanization patterns between Australia and Bangladesh. **1 point**

Accept one of the following:

- B1. Australia has a higher percentage of urban population than Bangladesh does, or Australia's percent urban population is more than twice that of Bangladesh.
 - B2. Australia's urban population growth rate is lower (e.g., 1% lower) than the urban population growth rate of Bangladesh.
 - B3. All of Australia's urban population has access to safe drinking water, while less than half (e.g., 45%) of Bangladesh's urban residents do.
 - B4. All of Australia's urban population has access to electricity, whereas Bangladesh has a slightly lower percentage (e.g., 94%) with access to electricity, or 6% of the urban Bangladeshi population is without electricity.
 - B5. While there are no squatter settlements in Australian urban areas, more than half (e.g., 55%) of Bangladesh's urban residents live in squatter settlements.
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- (C)** Describe ONE common characteristic of the built environment of squatter settlements in developing countries. **1 point**

Accept one of the following:

- C1. Squatter settlements are often self-constructed using whatever materials are available to residents at low or no cost (e.g., scrap metal, lumber, cardboard, woven straw mats, tarps, bricks, cinderblocks, tents).
 - C2. Squatter settlements typically lack zoning regulations, so may be constructed haphazardly in an unplanned way.
 - C3. Squatter settlements typically have high density compared to housing in rural areas or single-family homes in the urban areas of developing countries.
 - C4. Squatter settlements are often constructed in (marginal) locations with unfavorable or precarious physical geographical or environmental characteristics (e.g., hillsides, riverbanks, polluted areas, swampy areas).
 - C5. Squatter settlements may lack access to basic infrastructure (e.g., sewers, piped water, electricity lines) and/or may have to pay for the delivery of water or the installation of utilities.
 - C6. Squatter settlements often rely on self-constructed infrastructure (e.g., rainwater catchment systems, trash disposal, pit latrines, solar panels on roofs) that is not connected to public infrastructure.
 - C7. Squatter settlements typically lack sidewalks and have unpaved streets.
 - C8. Squatter settlements typically have informal businesses (e.g., small stores, taxi service, day care, street vendors, private communication, and transportation systems).
 - C9. Squatter settlements typically contain private homes, small businesses in the informal sector, and buildings that house social services (e.g., community health clinics, community stores, community schools).
 - C10. Squatter settlements typically contain both self-constructed or fully constructed homes with more permanent materials (e.g., brick, cement block) inhabited by longer-term residents.
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- (D)** Explain ONE positive health effect likely to result from improved access to electricity in urban areas. **1 point**

Accept one of the following:

- D1. People can use air conditioners and/or electric fans and/or heaters, thus lessening the risk of heat or cold-related illnesses.
- D2. People have improved access to refrigeration, reducing the risk of foodborne illnesses and/or preserving medicines that may need refrigeration.
- D3. With the ability to use electric cooking stoves and/or electric heaters, people are less exposed to unhealthy, indoor air pollutants from fuels (e.g., wood, kerosene, animal dung) used for cooking or heating.
- D4. There is less risk of personal injury from electric appliances than from kerosene or open fires.
- D5. With access to dependable electricity, healthcare facilities can operate more efficiently (e.g., lifesaving equipment, imaging technology, laser surgery, dialysis).
- D6. People have better access to hot water for sanitizing (e.g., hand washing, sanitizing equipment, disinfecting).
- D7. People can use electronic appliances (e.g., laptops, smartphones) to access the Internet and research health issues or solutions that make them more knowledgeable.
- D8. Home medical care can become more efficient with access to electricity (e.g., respiratory therapy, dialysis, motorized lift beds, chairs, and wheelchairs).
- D9. Street lighting may lessen the risk of personal injury (e.g., pedestrians crossing the street).

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- (E)** Explain ONE reason why individuals in less developed countries are likely to move to cities, contributing to the global trend of rural to urban migration **1 point**

Accept one of the following:

- E1. People may move to cities to find work (e.g., better and/or higher-paying work).
 - E2. People move to cities because there may be insufficient economic opportunities in rural areas due to job loss (e.g., mechanization and agribusiness), and/or increasing cost of land (e.g., rents, taxes).
 - E3. People may move to cities for educational opportunities.
 - E4. People may move to cities to access better services and/or infrastructure (e.g., health care, housing, clean water, electricity).
 - E5. People may move to cities because of enhanced social and cultural opportunities.
 - E6. People may have lost their homes in rural areas due to disasters (e.g., floods, droughts, war) and/or environmental degradation (e.g., soil erosion, water resource depletion).
 - E7. People may have lost their homes in rural areas due to infrastructure projects (e.g., dams, canals, roads).
 - E8. People may move to cities to join family members who live there.
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- (F)** Explain ONE likely effect of rural to urban migration on the economy of a developing country. **1 point**

Accept one of the following:

- F1. As the urban labor force grows due to rural to urban migration, urban-based manufacturing (e.g., secondary) and service (e.g., tertiary) sectors may expand.
- F2. Urban standards of living tend to be higher than rural standards of living, creating uneven development within the country.
- F3. Rural areas and/or primary sector activities may be neglected as governments, and private businesses focus investments in urban areas.
- F4. Rural economies may benefit from money that people who have moved to cities send back to their relatives in rural areas.
- F5. As migrants move to cities, higher wages may generate disposable income that stimulates further economic growth (e.g., the multiplier effect) and/or the creation of additional employment opportunities.
- F6. Agglomeration economies and/or agglomeration economies of scale may spur economic growth in a developing country due to lower production costs and higher productivity.

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- (G)** Explain a limitation of the data shown in the table in illustrating challenges to urban sustainability. **1 point**

Accept one of the following:

- G1. There are no data on environmental components of sustainability over time (e.g., air quality, sprawl, greenhouse gas emissions, ecological footprint, waste production and treatment, vulnerability to natural hazards).
- G2. There are insufficient data on economic components of urban sustainability (e.g., the type of energy production and use [non-electric], employment or unemployment, transportation, cost of living, poverty).
- G3. There are insufficient data on social components of urban sustainability (e.g., environmental injustice, demographic characteristics such as age and race, governance, health, education, urban upgrade, or redevelopment programs).
- G4. The data in the table do not provide information on policies, projects or sustainability planning programs.
- G5. Data shown is at a national scale and does not provide for city-specific data nor variability among cities.

Total for question 2: 7 points