

48 Djibouti	97 Liberia	146 Saint Vincent and the Grenadines
49 Dominica	98 Libyan Arab Jamahiriya	147 Samoa

## b. Chapter Questions

### Chapter 1: Environmental Problems, Their Causes, and Sustainability

1. What is its location, neighboring countries, and major types of topography?
2. Draw its flag and indicate its major languages.
3. Is it a LDC or MDC? What are some clues?
4. Is there economic growth and if so, is it sustainable?
5. What is the average ecological footprint? Do the citizens suffer from affluenza?
6. Draw or download a picture of sample native costume(s).

### Chapter 2: Science, Matter, Energy, and Systems

1. What is the major form of energy used to fuel the economy?
2. Are the four scientific principles of sustainability be used? Explain.

### Chapter 3: Ecosystems: What Are They and How Do They Work?

1. Describe a typical food web.
2. What type of gross and net primary productivity is found?
3. Describe some producers, herbivores, carnivores, omnivores, decomposers, and scavengers.
4. What are some of the human based effects on the major nutrient cycles?
5. Are there any types of research being used to study its ecosystems?

### Chapter 4: Biodiversity and Evolution

1. Are there any hotspots of biodiversity?
2. Has any evidence (fossils) of evolution been found? Describe it.
3. What climate conditions have influenced the natural selection in the major biomes?
4. Were there any major extinctions? What were the causes?
5. Describe some unique indicator, keystone, foundation, nonnative, and specialist species.

### Chapter 5: Biodiversity, Species Interactions, and Population Control

1. Indicate specific examples from your country
  - a. Interspecific competition
  - b. Predator and prey
  - c. Parasite and host
  - d. Mutualism
  - e. Commensalism
2. For each of your examples in #1, indicate whether each population lives in populations or clumps.
3. Give two examples of r-selected and k-strategists.
4. Describe some of the succession. Is it primary or secondary? What would be the normal climax community?
5. For the stable ecosystems, is the stability due to inertia (persistence) or resilience? Describe your reasoning.

### Chapter 6: The Human Population and Its Impact

1. How big is the population and what is its rate of growth? What is its doubling time (rule of 70)? Is it faster or slower than the world's average?
2. What is the birth rate, the death rate, the immigration rate and emigration rate? Does this data agree with the rate of growth from #1?  $((b+i) - (d+e))$
3. Draw the population age structure. Indicate how the age structure indicates the replacement fertility rate?
4. What is its stage of the demographic transition?
5. Is family planning working to shift the transition to the right? Are there problems with its population growth? Explain.
6. Describe the role (if any) of family planning. How does this explain #1-5?

### Chapter 7: Climate and Biodiversity

1. What types of climate are present?
  - a. What is the effect of the global air circulation?
  - b. What is the effect of ocean currents?
  - c. What effects are there due to latitude (insolation) and topography?
  - d. How do the above influence the temperature and precipitation?
2. How does the climate cause the biomes present?
3. Draw and describe a climatograph for each of the major biomes.
4. What are some of the human impacts on those biomes?

### Chapter 8: Aquatic Biodiversity

1. What are the major types of aquatic biodiversity (marine and freshwater, if any)?
2. Describe types of plankton, nekton and benthos present.
3. Describe some of the ecological and economic services preformed by your marine ecosystems.
4. Describe the way humans have degraded the aquatic ecosystem(s).

### Chapter 9: Sustaining Biodiversity: The Species and Ecosystem Services

1. Indicate three species that are extinct and/or endangered, discuss the reasons, and describe their instrumental value.
2. What green careers are or could be available.
3. How apparent is HIPPCO?
4. What are the impacts of two introduced species and what can be done to control them?
5. What percentage of the country is protected land? Is poaching a problem and what is being done to prevent it?
6. What international and national legislation is helping protect wild species?

### Chapter 10: Sustaining Terrestrial Biodiversity: Saving Ecosystems and Ecosystem Services

1. What are the major threats to the terrestrial ecosystems and what are the causes of these threats?
2. How are the forests managed and sustained?
3. How are the rangelands managed and sustained?
4. Describe the system of national parks and nature reserves?
5. How is the country maintaining its terrestrial biodiversity? Is the country a biodiversity hotspot and, if so, why?

### Chapter 11: Sustaining Aquatic Biodiversity and Ecosystem Services

1. What are the major threats to the aquatic ecosystems and what are the causes of these threats?
2. How are the marine ecosystems managed and sustained?
3. How are the freshwater ecosystems managed and sustained?
4. How are the wetlands ecosystems managed and sustained?
5. Describe the system of aquatic reserves?
6. How is the country maintaining its aquatic biodiversity? Is the country a biodiversity hotspot and why?

### Chapter 12: Food Production and the Environment

1. What is the state of food security?
2. What type of agriculture is used and is it done sustainably?
3. Describe the major types of soil found in the country.
4. Describe the types of environmental problems associated with food production.
5. Describe the major method of protecting crops from pests?

### Chapter 13: Water Resources

1. Describe the major methods of obtaining usable water.
2. What is the current and future status of water shortage?
3. What are the advantages and disadvantages of dams in the country (if possible)?
4. How prevalent is flooding and what is done to resolve the problem?

### Chapter 14: Nonrenewable Mineral Resources

1. What are the major geological processes and hazards (how frequent) of your country?
2. What are the major mineral resources and what are environmental problems are found?
3. What is the expected depletion time for the major nonrenewable mineral resources?
4. What can be done to use the resources more sustainably?

### Chapter 15: Nonrenewable Energy

1. What are the major sources of energy used?
2. What are the advantages and disadvantages of the number one and two energy source used?
3. What are the environmental consequences due to the waste products from these two energy sources?

### Chapter 16: Energy Efficiency and Renewable Energy

1. How can energy efficiency and waste be improved?
2. Is solar energy an option and what are its advantages and disadvantages?
3. Is wind energy an option and what are its advantages and disadvantages?
4. Is biomass as an energy source an option and what are its advantages and disadvantages?
5. Is geothermal energy an option and what are its advantages and disadvantages?
6. Is hydrogen as an energy source an option and what are its advantages and disadvantages?

### Chapter 17: Environmental Hazards and Human Health

1. Describe the effects of AIDS on the age pyramid.
2. What types of biological hazards exist and how deaths per year are there for each?
3. What types of chemical hazards exist and how deaths per year are there for each?
4. Describe the process the country uses (or should use) to evaluate chemical hazards.

### Chapter 18: Air Pollution

1. What are the current major outdoor air pollution problems and sources?
2. How is acid deposition affecting your country?
3. What are the current major indoor air pollution problems and sources?
4. What are the health effects of air pollution?
5. What is being done to deal with air pollution?

### Chapter 19: Climate Disruption

1. What indications are there that annual average temperatures and climate are changing?
2. What are some of the probable effects of a warmer atmosphere?
3. What is being done to slow the climate change?
4. What are the effects of ozone depletion and what is being done to reduce the depletion?

### Chapter 20: Water Pollution

1. What are the causes and effects of water pollution?
2. What are the major water pollution problems in streams and lakes?
3. What are the major water pollution problems in groundwater and other drinking water sources?
4. What are the major water pollution problems affecting oceans?
5. What is being done to improve the water pollution for each of the above?

### Chapter 21: Solid and Hazardous Waste

1. Is e-waste created or dumped in your country? Explain the ramifications.
2. What are solid waste and hazardous waste and how big is the problem?
3. How is currently being done with the solid waste?
4. What should be done?
5. Is the country making the transition to a more sustainable low-waste society? How?

### Chapter 22: Urbanization and Sustainability

1. What are the major population trends in the urban areas?
2. What are the major urban resource and environmental problems?
3. Is transportation affecting the environment of your countries urban areas?
4. Is there any urban land use planning – especially to develop eco-cities?

### Chapter 23: Economics, Environment, and Sustainability

1. How strong is the economic system in your country and is it related to a sustainable environment?
2. What value is put on natural capital, pollution control, and resource use?
3. What economic tools are being use to deal with environmental problems?
4. What level is the poverty, how would it be reduced, and what would that do to environmental problems?

### Chapter 24: Politics, Environment, and Sustainability

1. How has the government helped make the transition towards a more sustainable society?
2. How is any policy, especially environmental, made?
3. What are the major environmental laws and how effective are they in dealing with their respective problems?
4. Describe the roles of environmental groups.
5. What is being done to increase environmental security? How effective is it?

## Chapter 25: Environmental Worldviews, Ethics, and Sustainability

1. What are the major environmental worldviews in your country?
  2. How effective has education been in improving the people's ability to live sustainably
- 
2. Important terms
    - a. See Glossary for each chapter
  3. Works Cited
    - a. United Nations. UN in Brief. 21 Aug. 2008 <http://www.un.org/Overview/uninbrief/>.