

Country Environmental Analysis Project Guidelines
Spring 2004
2/22/04

Each lab group will be assigned a country for which they will, as a group, conduct an environmental analysis. On the last day that a lab section meets (4/28, 4/29, 4/30), the group will deliver an oral report supported by a PowerPoint presentation that summarizes their completed project. The group must submit a copy of the presentation on disk. All members of each group are expected to share equally in the work required to complete this project. This project is worth 20 points.

Every attempt should be made to address in the presentation the points listed below. Additional relevant information of interest can be included. A computer projector will be provided for use with the PowerPoint presentations. The oral report should be approximately 15-20 minutes in length and there will be time after each presentation for classmates to ask questions of the presenting group. The information necessary to address the points below will be more readily accessible for some countries than for others. When you are not successful at finding the requested information, include a PowerPoint slide in the appropriate section of the presentation and indicate what information you were trying to locate, where you looked (specifically), and that you were unsuccessful.

A list of websites is included at the end of this guide. These sites may be of assistance in completing this project. However, you will definitely need to go beyond this list and search out additional sources of information.

Points to address in presentation

I. Introduction (1 slide)

1. What is your assigned country?
2. On which continent is your country located?
3. In which hemisphere is your country located?
4. What are the names of your group members?
5. *Summarize this information in at least one PowerPoint slide.*

II. Environmental Awareness and Attitudes (1-2 slides)

1. What is the current level of environmental awareness of the citizens of your country?
Speculate on why this level of awareness exists in your country.
2. What are the current environmental attitudes of the citizens of your country?
Speculate on why these environmental attitudes exist in your country.

3. Is there evidence of any significant change in awareness and/or attitudes over the past 25 years? Speculate on what the driving force is behind these changes.
4. *Summarize this information in at least one PowerPoint slide.*

III. Human Population Issues (3-5 slides)

1. What was the population of your country in 1900, 1950, and 2000?
2. What is the projected population for your country for 2050?
3. Prepare a line graph that combines the information from 1 and 2 above. The x-axis will be the year and the y-axis will be the population size. Use a solid line for the actual figures and a dashed line for the projected figures.
4. *Place the graph you prepared in 3 above into a PowerPoint slide.*
5. What is the current growth rate, r , for your country? (This is also referred to as the intrinsic rate of growth).
6. What would be the doubling time for you country based on the current growth rate, r ? To calculate the doubling time (D), divide 0.693 by r . ($D=0.693/r$).
7. What is the average age of marriage?
8. What is the total fertility rate
9. What percent of the women receive a secondary education?
10. What is the male literacy rate? What is the female literacy rate?
11. What percentage of the population lives in urban areas? What percentage of the population lives in rural areas?
12. What is the population density (number of people per km^2)?
13. What is the annual per capita income (or Gross Domestic Product or Gross National Product)?
14. Summarize the information from 5 through 13 above in a tabular form.
15. *Place the table you prepared in 14 above into a PowerPoint slide.*
16. What is the current age structure? Prepare or obtain an age structure diagram (population pyramid) containing at least three age categories (0-14 years, 15-44 years, 45 and older). (The age structure diagram can be prepared in Excel as you did in the lab exercise. The graph can then be placed into a PowerPoint slide).
17. *Place the age structure diagram prepared in 15 above into a PowerPoint slide.*

IV. Biome (2-3 slides)

1. Which biomes does your country contain (see page 114 of your text, figure 6.7)?
2. Describe the climate, soil, and characteristic plants and animals found in the biome that is most represented in your country.
3. *Summarize the information from 1 through 2 above in a PowerPoint slide.*
4. Prepare a climatograph for your country. You will need the average precipitation and average temperature for each month. (See pages 117-126 in your textbook for examples).

5. *Place the climatograph into a PowerPoint slide.*

V. Energy (3-5 slides)

1. What percentage of the country's energy needs are met by coal, oil, natural gas, hydro, wind, solar, and geothermal sources?
2. Prepare a pie graph illustrating the information in 1 above.
3. *Place the pie graph you prepared in 2 above into a PowerPoint slide.*
4. What percentage of total energy used by the country goes to industrial uses, transportation uses and building/commercial uses?
5. Prepare a pie graph illustrating the information in 4 above.
6. *Place the pie graph you prepared in 5 above into a PowerPoint slide.*
7. What, if any, energy source does your country export?
8. What, if any, energy source does your country import?
9. What percentage of the world's coal, oil, and natural gas reserves are located in your country?
10. What does a gallon or liter of gasoline cost in your country?
11. How many nuclear power plants are operated in your country?
12. How many hydroelectric dams does your country have?
13. *Summarize the information from 7 through 12 above in a PowerPoint slide.*

VI. Land (1-2 slides)

1. Describe the land use practices of your country.
2. Describe any major land pollution problems of your country (what causes the pollution, what is being done to address the problem).
3. What percentage of the land of your country is covered in forests?
4. What is the rate at which forest cover is being lost in your country?
5. What percentage of the land in your country is dedicated to agricultural use?
6. *Summarize the information from 1 through 5 above into a PowerPoint slide?*

VII. Water (2-3 slides)

1. Describe the water resource of your country (is there too much, too little water, is the water of poor quality).
2. Describe any major water pollution problems of your country (what causes the water pollution, what is being done to address the problem).
3. What level of wastewater treatment is available in your country and to what extent is it used?
4. *Summarize the information from 1 through 3 above into a PowerPoint slide?*
5. What percentage of water usage in your country goes to irrigation, industry, and domestic/municipal uses?
6. Prepare a pie graph showing the distribution of water usage from 3 above.

7. *Place the graph you prepared in 4 above in a PowerPoint slide.*

VIII. Air (1-2 slides)

1. Describe the major air pollution problems of your country (what are the major pollutants, what are the sources of these pollutants, what is being done to address the problem).
2. Do any of the major air pollution problems of your country originate in a neighboring country? If so, are there any significant atmospheric circulation patterns that are responsible for bringing the air pollutants into your country?
3. *Summarize the information from 1 and 2 above into a PowerPoint slide?*

IX. Solid and Hazardous Waste (2-3 slides)

1. How does your country dispose of solid waste? What percentage of total municipal waste is disposed of by each of the methods employed in your country?
2. Prepare a pie graph for the information in 1 above.
3. *Place the graph you prepared in 2 above in a PowerPoint slide.*
4. What is the composition of municipal solid waste for your country?
5. Prepare a pie graph for the information in 4 above.
6. *Place the graph you prepared in 5 above in a PowerPoint slide.*

X. Environmental Legislation and Policy (1-2 slides)

1. Describe your country's major environmental legislation and policies and your country (when did they go into effect, are they enforced, are they effective).
2. *Summarize the information from 1 above into a PowerPoint slide?*

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Presentation/Grade Guide

Component	Points
Oral presentation (5 points)	
<ul style="list-style-type: none"> • audibility 	0.75
<ul style="list-style-type: none"> • eye contact 	0.75
<ul style="list-style-type: none"> • amount of information presented relative to information in Powerpoint presentation 	1.50
<ul style="list-style-type: none"> • length, 15 - 20 minutes 	1.00
<ul style="list-style-type: none"> • degree to which group members shared in work of project and presentation 	1.00
Powerpoint Presentation (15 points)	
<ul style="list-style-type: none"> • minimum number of slides is 18, distributed as follows: 	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ introduction (1) 	0.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ environmental awareness & attitudes (1) 	1.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ human population issues (3) 	2.0
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ biome (2) 	1.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ energy (3) 	2.0
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ land (1) 	1.0
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ water (2) 	1.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ air (1) 	1.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ solid & hazardous waste (2) 	1.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ environmental legislation & policy (1) 	1.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ sources (1) 	0.5
<ul style="list-style-type: none"> • Submit disk with presentation (1 point will be deducted if no disk submitted) 	
Project Total = 20.0	

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Topic	Site Name	Site Address
Agriculture	Agrifor (agriculture, food, forestry)	http://agrifor.ac.uk
Air Pollution	China SEPA Environmental Research International Issues	http://www.chinaonline.com/refer/ministry_profiles/SEPAL3.asp
Air Pollution	Density & Air Pollution: International Urban Areas	http://www.demographia.com/db-intlapdens.htm
Air Pollution	Regional Air Pollution in Developing Countries	http://www.york.ac.uk/inst/sei/rapidc2/rapidc.html
All	Green.com Strategic Environmental Communication, Reports by country	http://www.greencom.org/greencom/papers.asp?type=country&letter=E
All	The regional Environmental Center for Central and Eastern Europe	http://www.rec.org
All	Agricultural and Environment	http://jperret.tripod.com/resources_links1.html
Biomes	The World's Biomes	http://www.ucmp.berkeley.edu/glossary/gloss5/biome/
Biomes	Alien Earth - Climate Biomes	http://www.aliexplorer.com/ecology/e1.html
Climate	World Climate	http://www.worldclimate.com/
Climate	Global Hydrology and Climate Center	http://www.ghcc.msfc.nasa.gov/
Energy	Global Energy Network Institute	http://www.geni.org/
Energy	Fossil Energy Related Global Activities	http://www.fossil.energy.gov/international/world.html
Energy	World Energy Assessment	http://www.undp.org/seed/eap/
Energy	World Energy Council	http://www.worldenergy.org/wec-geis/
Environmental attitudes	Eurobarometer 51.1	http://www.data-archive.ac.uk/findingData/snDescription.asp?sn=4201
Environmental awareness	Hong Kong University Theses On-line	http://sunzi.lib.hku.hk/hkuto/searchSubject.jsp?subj=Environmental%20education

Topic	Site Name	Site Address
Natural Resources	Canada's Attitudes Towards Natural Resources	http://www.nrcan.gc.ca/
Environmental awareness	Environmental Awareness Module - Spain	http://www.mma.es/polit_amb/fondos/redauto/integracion/moding.pdf
Environmental legislation and policy	European Union Nature Conservation Policy and Legislation	http://www.ecnc.nl/doc/europe/legislat/conveu.html
Environmental legislation and policy	Environmental Policy Centre Europe	http://www.epce.com/
Environmental legislation and policy	International Environmental Policy Reference Guide	http://environment.harvard.edu/guides/intenvpol/resources/AJP2714_PAIS_International_Database.html
Environmental legislation and policy - Wildlife & biodiversity	International Environmental Law and Policy	http://www.wcl.american.edu/environment/iel/thirteen.cfm
Forests	European Forest Institute	http://www.efi.fi/
Forests	Agrifor (agriculture, food, forestry)	http://agrifor.ac.uk/
Land	Gateway to Land and Water Information by FAO	http://www.fao.org/ag/agl/swlwpnr/swlwpnr.htm
Population	World Resource Institute	www.wri.org
Population	Population Reference Bureau	www.prb.org
Population	Human Population Issues	http://www.unlv.edu/courses/ENS100/devine/07chap/
Population	Population Reference Bureau	http://www.popnet.org/
Soil	International Soil Reference and Information	http://www.isric.nl/
Solid Waste	Global Perspectives on Solid Waste Management	http://www.afn.org/~recycler/waste.html
Sustainability	International Institute for Sustainable Development	http://www.iisd.org/default.asp
Water	Gateway to Land and Water Information by FAO	http://www.fao.org/ag/agl/swlwpnr/swlwpnr.htm

Topic	Site Name	Site Address
Water	International Water Law Project	http://www.internationalwaterlaw.org/
Water	Water Environment Federation	http://www.wef.org/
Water	Global Institute of Water Assessment	http://www.giwa.net/