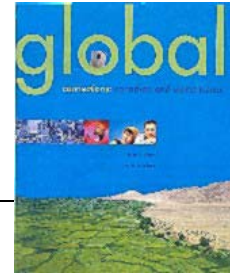
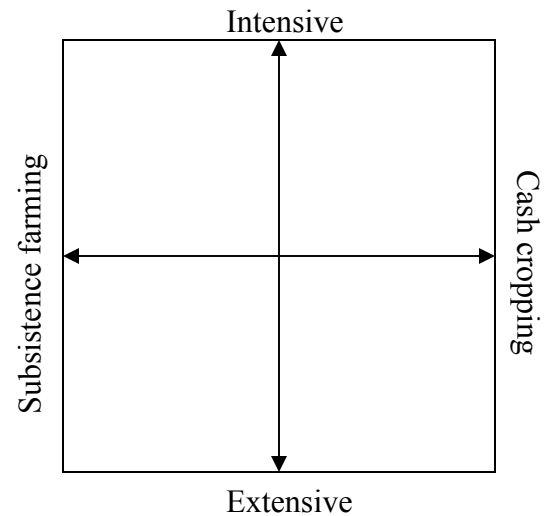


Nature of Food and Poverty



- 1) Read Chapter 10 in *Global Connections*. As always, check your understanding of this topic by defining the terms in **bold letters** that appear throughout the chapter. If you would like an official definition for each term, they are listed in the glossary at the back of the textbook.
- 2) Describe, with specific examples, how technological breakthroughs increased food production in the years up to 1870.
- 3) Describe each of the natural systems that agriculture depends upon.

- 4) On the graph at right, mark the locations of each of the following types of farming operations.
 - a) a 1000 hectare cattle ranch in Alberta
 - b) nomadic goat and sheep herding in North Africa
 - c) a 0.2 hectare family farm in Bangladesh
 - d) a vineyard in southern France
 - e) a 75 hectare southern Ontario dairy farm
 - f) a 300 hectare corn and soybean farm in Iowa



- 5)
 - a) Make a point-form summary of the events and importance of the Green Revolution.
 - b) Why have some of the benefits of the Green Revolution been lost in recent years?
- 6) Create a map to show the food availability in the world, using the data attached. Use a gradient colour scheme (the darker the colour, the higher the availability of food). You will divide the countries into four groups: those with much more energy in their diets than they need, somewhat more energy, somewhat less energy, and much less energy. Choose the class boundaries (in terms of kJ/capita/day) you want to use for each group.

Some hints:

- It makes sense to use 10 350 kJ/person/d as a class boundary. Why?
 - The upper boundary of one class should be the lower boundary of the next.
 - The class names you choose will appear in the legends of your maps. Think about what information you should give the map user.
- 7) Based on the map you created in question 6, what countries have the greatest problems with undernutrition? Why do these countries have a great problem providing enough food for their people? (Hint: Consider some of the other statistical categories with which we compare countries.)

- 8) Based on the map you created in question 6, what countries have the greatest problems with overnutrition? What is the evidence of overnutrition? What could be done to reduce this problem?
- 9) a) Create a summary of the advantages of and concerns about GMOs by completing the organizer below.
 b) On balance, do you personally feel comfortable about eating GMO products? Do you think you have enough information to make an informed choice? Explain.

Advantages of GMO Revolution	Concerns about GMO Revolution

- 10) Investigate eight food issues for the future, using a jigsaw approach. Research one of the topics below and present your findings to other members of the class who have studied other issues and who will present their findings to you.
- a) organic farming
 - b) corporate farming
 - c) loss of genetic diversity
 - d) hydroponic farming
 - e) aquaculture
 - f) land reform
 - g) agricultural subsidies
 - h) role of women in agriculture

COUNTRY	kJ/c/d
Afghanistan	6448
Algeria	12335
Angola	7974
Argentina	13328
Australia	13307
Austria	15742
Azerbaijan	10341
Bangladesh	8812
Belgium	15507
Benin	10718
Bolivia	9293
Bosnia and Herzegovina	11150
Botswana	9448
Brazil	12507
Bulgaria	10337
Burkina Faso	9608
Byelarus	12159
Cambodia	8673
Cameroon	9448
Canada	13299
Central African Republic	8154
Chad	8573
Chile	12076
China	12692
Colombia	10881
Congo	9314
Congo DR	6344
Costa Rica	11661
Croatia	10404
Cuba	10743
Czech Republic	13006
Denmark	14229
Dominican Republic	9742
Ecuador	11284
Egypt	14020
Eritrea	6976
Estonia	14145
Ethiopia	8476
Finland	13521
France	15046
Gabon	10743
Georgia	10106
Germany	14460
Ghana	11309

COUNTRY	kJ/c/d
Greece	15524
Guatemala	9096
Guinea	9859
Guinea-Bissau	9775
Guyana	10819
Honduras	10035
Hungary	14489
Iceland	14003
India	10173
Indonesia	12159
Iran	12205
Iraq	9205
Ireland	15138
Italy	15340
Ivory Coast	10852
Japan	11573
Jordan	11518
Kazakhstan	12532
Kenya	8233
Kyrgyzstan	12029
Laos	9495
Latvia	11962
Lesotho	9637
Liberia	8698
Libya	13848
Lithuania	12738
Madagascar	8409
Malawi	9138
Malaysia	12231
Mali	10069
Mauritania	11053
Mexico	13261
Moldova	11581
Mongolia	8300
Morocco	12419
Mozambique	8074
Myanmar	11908
Namibia	11099
Nepal	10207
Netherlands	13802
New Zealand	13626
Nicaragua	9331
Niger	8753
Nigeria	11942
North Korea	9155
Norway	14305
Pakistan	10274

COUNTRY	kJ/c/d
Panama	10425
Papua New Guinea	9113
Paraguay	10613
Peru	10995
Philippines	9968
Poland	14145
Portugal	15570
Romania	13718
Russia	12222
Saudi Arabia	12046
Senegal	9457
Serbia	10768
Sierra Leone	7806
Slovakia	13127
Somalia	6821
South Africa	12092
South Korea	12960
Spain	14045
Sri Lanka	10077
Sudan	9838
Suriname	11112
Sweden	13027
Switzerland	13798
Syria	12729
Tajikistan	7207
Tanzania	7986
Thailand	10500
Togo	9759
Tunisia	13823
Turkey	14313
Turkmenistan	11208
Uganda	9884
Ukraine	12029
United Arab Emirates	13374
United Kingdom	13969
United States	15805
Uruguay	12063
Uzbekistan	9934
Venezuela	9453
Vietnam	10823
Yemen	8539
Zambia	8011
Zimbabwe	8870

