

Directions: Follow the page guidance as you complete this guided reading.

Re-read Rubenstein pg 274 to understand the terms LDC and MDC. Understand how they are roughly distributed by examining the map on page 282 fig. 9-11. (We will be coming back to this concept in more detail).

Rubenstein p 308. Read “Wheat Farmers in Kansas and Pakistan”.

1. How is most of the work performed by the Pakistani farmer? \_\_\_\_\_
  - a. What is most of their production used for? \_\_\_\_\_
  - b. How is the wheat grown in Kansas used? \_\_\_\_\_
  
2. (skip to Rubenstein p 310 – 314). Keeping the above in mind, note the differences between subsistence and commercial farming.

		Subsistence	Commercial
Definition or Purpose			
Where found?			
Farmers as a % of the labor force			
Use of machinery (and other technology)  Make sure to supplement your understanding of the material to the right by also reading de Blij p 368 – 369		de Blij p 374. Describe “shifting cultivation” (you can write sideways)	What machines have replaced manual labor?
			Besides machinery, what other advancements have aided commercial farmers?  1.  2.  3.
Farm size			Note details about farm size and ownership.  What is being lost to urban sprawl?  Note trend in farm size (de Blij p 368)
What impact would the above facts have on agriculture density (not in book, this is review)?			
Relationship of farming to other businesses		What is agribusiness?  Examples of those involved in agricultural support businesses (de Blij p 368).	

	Subsistence	Commercial
List types found in LDCs (detail and characteristics to follow)	<ol style="list-style-type: none"> <li>1. shifting cultivation</li> <li>2. pastoral nomadism</li> <li>3. intensive wet rice dominant</li> <li>4. intensive wet rice not dominant</li> </ol>	<ol style="list-style-type: none"> <li>5. plantation</li> </ol>
List types found in MDCs (details and characteristics to follow)		<ol style="list-style-type: none"> <li>1. mixed crop and livestock</li> <li>2. dairy farming</li> <li>3. grain farming</li> <li>4. livestock ranching</li> <li>5. Mediterranean</li> <li>6. commercial gardening and fruit</li> </ol>

3. (Rubenstein p 329 – 335) What are some challenges being faced in both subsistence and commercial farming?

Subsistence Farming Challenges	Commercial Farming Challenges
<p>In what two ways has population growth lead to the changes in subsistence agriculture?</p> <ol style="list-style-type: none"> <li>1.</li> <li>2. (make sure you understand what the term “intensification” means, you do not need to detail all of the various levels of fallow).</li> </ol> <p>btw, do you know what fallow means? Define here.</p> <p>What problem is faced by governments in LDCs as they try to expand production?</p> <p>How are funds generated by LDCs in order to purchase agricultural improvements?</p> <p>How is labor divided in LDCs with reference to subsistence farming and growing crops for export?</p> <p>What dilemma is faced by LDCs?</p> <p>To what export crop (in general) have many subsistence farmers in LDCs turned because of its lucrative return?</p> <p>(de Blij p 393 - 394) What organizations have arisen in response to US government efforts to crackdown on drug trafficking?</p> <p>What effect have these organizations had on areas under their control?</p>	<p>How are commercial farmers victims of their own success?</p> <p>(skip “Importance of Access to Markets”)</p> <p>What has caused overproduction?</p> <p>Why has demand not increased with falling prices due to overproduction?</p> <p>What three methods does the government use to address the problem of overproduction?</p> <ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> </ol> <p>What is sustainable agriculture?</p> <p>Briefly summarize the three principle practices of sustainable agriculture?</p> <ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> </ol>

4. Now that we've learned about the main differentiation between types of agriculture (subsistence vs. commercial) and the challenges faced by each in the modern world, let's go back and learn about the history of the development of agriculture.

Use both Rubenstein p 308 – 310 and de Blij p 369 – 373

a. (compare both sources) What is agriculture? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Do we have to eat what is produced for it to be considered agriculture? \_\_\_\_\_

i. What does it mean to "cultivate" something? \_\_\_\_\_

ii. What is a crop? \_\_\_\_\_

**Timeline on the Development of Agriculture:**

**Describe how humans lived prior to around 10,000 years ago**

According to de Blij, what two skills did humans master **BEFORE** the development of agriculture?

What is domestication (look it up?)		Crops	Animals (see Rubenstein fig. 10-3)
Invention of Agriculture (Neolithic Revolution or First Agricultural Revolution)	South/SE Asia		
	SW Asia/Fertile Crescent		
	East Asia/China (Yellow/Yangtze)		
	Central Africa		
	Latin America		
<b>Second Agricultural Revolution (de Blij p 375 – 376)</b>  <b>When did this happen?</b>  <b>Where did it begin?</b>	How are the Industrial Rev. and the Second Agricultural Revolution connected?  What new crops were introduced and from where?  What crop growing strategy were they able to implement?  What English law allowed farming innovations to take place? Explain.  What other technologies improved production as well?	Selective breeding (look it up and describe, then include examples from de Blij p 376)	

**Rubenstein p 336 – 337**

What were the two main practices that led to increased agricultural production during the 1970s and 1980s?

Who won the Nobel Peace Prize for his development of the “miracle wheat seed”?

In order to take advantage of the new seeds, what are farmers required to use?

Therefore, what must governments in LDCs do in order to keep up the momentum of the Green Revolution?

**Read *Global Forces, Local Impacts* p 332**

What does “GM” (GMOs) stand for?

How widespread is the use of GM within the United States?

Why would LDCs (like those in Africa) be resistant to the adoption of GM crops?

- 1.
- 2.
- 3.

What types of corporations control the GM crops?

**de Blij p 377 – 378 (this is the better discussion of this topic)**

How far back and to where does the Green Rev. really begin?

With what crop was the Green Rev. **MOST** effective in increasing yields in Asia?

Since the Green Revolution has increased production, what has caused most famines?

Because of its focus on rice, wheat and corn, where has the Green Revolution been less effective? Why?

**Rubenstein p 339 – 340: Case Study Revisited/Africa’s Food Supply Crisis**

How did reality compare to Malthus’ thesis about the relationship of population growth to the increase in food supply?

What region is not growing its food supply as rapidly as its population? Give details.

In what two African sub-regions is this problem especially severe?

- 1.
- 2.

What factors have contributed to the food-shortage crisis in the region describes above under #2?

- a.
- b.
- c.
- d.

**Criticisms of the Green Revolution (de Blij p 378 – 381) (Make sure to read/understand the criticisms of Vandana Shiva)**

What are growing concerns regarding the higher inputs of chemical associated with the Green Revolution?

What are some economic concerns connected with the Green Rev.?

According to de Blij, why do some people have a problem with GMOs?

How has the Green Revolution, increase tensions within rural households in Sub-Saharan Africa?

What type of agricultural society has been most threatened by the impacts of modernization?

5. Continued Food Insecurity (**de Blij p 368, last paragraph**). Despite the improvements in food supply provided by the Green Revolution, what are four major issues that continue to affect food security worldwide?

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

6. Strategies to Increase the Food Supply (**Rubenstein p 335**)

Strategy	Describe strategy and related challenges
Expanding Agricultural Land	What is desertification?
Increasing Productivity	<b>This relates to the methods used in the Green Revolution already discussed above</b>
Identifying New Food Sources	
Incr. Trade	

7. Read "Importance of Access to Markets" (exemplified by von Thünen's model) (**Rubenstein pg 329 – 330**)

Draw von Thünen's model (incl. a legend **)	Describe von Thünen's model.
	<p>When was von Thünen's model first proposed?</p> <p>What is considered first by commercial farmers when deciding which crops and animals to cultivate?</p> <p>What two costs does the farmer compare when making this consideration?</p> <p>What pattern did the model take? Describe w/reference to the diagram to the left. **</p> <p>What assumptions did the model make about site characteristics?</p> <p>According to von Thünen, what could alter the basic shape of the model?</p> <p>What did the model fail to take into account?</p> <p>For what type of region was the model developed?</p>

8. Major Global Agricultural Regions (Rubenstein p 314 – 329, read de Blij p 386 – 392 to supplement)

Area	Type	Characteristics/Vocabulary	Future
LDCs	Shifting cultivation	What type of climate region/biome? Describe two chief characteristics.  How many people? Describe slash-and-burn agriculture  swidden:  crops:  land ownership: % of world's land/compared to other types of agriculture	What competing activities are replacing shifting cultivation in tropical rainforests?  Why do defenders of shifting agriculture say it is environmentally sound?  The rate of this process which threatens our global environment has increased in Brazil?
	Pastoral Nomadism	What is it?  Best climate? Where? Examples of nomadic groups? Global pop.? % of global land area?  How do the nomads feed their herds?  What are the four major types of animals?  Describe their pattern of movement.  transhumance:  pasture:	Describe how modern technology and governments threaten the pastoral nomadism lifestyle.
	Intensive Subsistence	What does "intensive" mean (lecture)?  Major regions? What is the common trait?  Plot sizes?  How is the work done?  Land usage?	<b>Wet rice dominant.</b> Where dominant?  sawah (paddy):  How do wet rice farmers modify their land so it can be flooded?  double cropping:  <b>Wet rice not dominant.</b> What climate conditions? Where?  Two most common crops?
	Plantation	What climate regions? Where?  Owners?  Crops sold where?	Examples of crops specialized?  Labor force?

Area	Type	Characteristics/Vocabulary	
<b>MDCs</b>	<b>Mixed Crop and Livestock</b>	<p>Where is this most common?</p> <p>How are animals and crops integrated?</p> <p>Advantages:</p> <p>What are the two most important crops?</p>	
	<b>Dairy Farming</b>	<p>Located near what? Why?</p> <p>What is this area called?</p> <p>Why has this area expanded?</p> <p>What % of dairy farming is now conducted in LDCs?</p>	<p>What two features of dairy farming have caused economic difficulties?</p>
	<b>Grain Farming</b>	<p>What are examples of grains?</p> <p>Who is the main consumer of grains?</p> <p>Which is the most important, why?</p> <p>What countries are the world's largest grain producers?</p> <p>What two machines have mechanized wheat harvesting?</p>	<p>Describe the two main grain production areas in the U.S.</p>
	<b>Livestock Ranching</b>	<p>How is ranching land usage described?</p> <p>In what areas is it best adapted for?</p> <p>On whose land do 60% of cattle graze in the United States today?</p> <p>Where are cattle fattened today?</p> <p>What is a CAFO? What shift does this represent in the description of ranching? (lecture)</p> <p>What other parts of the world have major ranching industries?</p>	
	<b>Mediterranean</b>	<p>Where does this activity primarily exist?</p> <p>How is the physical environment similar in these areas?</p> <p>What is horticulture?</p> <p>What are the two most important crops?</p> <p>Despite this, what is ½ the land in Mediterranean farming dedicated to? What is produced from this?</p>	
	<b>Commercial Gardening &amp; Fruit Farming</b>	<p>In what areas of the U.S. does this activity predominate? Why?</p> <p>What is another name for this activity? Why?</p> <p>What are some popular items with consumers grown on "truck farms"?</p>	

**What imprint does agriculture make on the cultural landscape? (de Blij p 381 – 386)**

9. What is the purpose of a cadastral system? \_\_\_\_\_
- \_\_\_\_\_
- a. What is the dominant cadastral system in the United States west of the Appalachian Mountains? This is also known by as what type of survey system? \_\_\_\_\_
- i. What law helped to establish this cadastral system as dominant? \_\_\_\_\_
- ii. What was the purpose of this law? \_\_\_\_\_
- \_\_\_\_\_
- iii. What is the visual effect on the landscape of this cadastral system? \_\_\_\_\_
- \_\_\_\_\_
- b. What cadastral system predominates on the eastern seaboard? \_\_\_\_\_
- i. What is used to demarcate parcels of land under this system? \_\_\_\_\_
- ii. Consequently, the shape of parcels of land under this system can be describes as what? \_\_\_\_\_
- c. Where was the Long-Lot Survey common? This shows the influence of what culture? \_\_\_\_\_
- \_\_\_\_\_
- i. Describe the shape of the lots? \_\_\_\_\_
- \_\_\_\_\_
- ii. Why do you think is a fair way of surveying land? \_\_\_\_\_
- \_\_\_\_\_
- d. What is primogeniture division of land? \_\_\_\_\_
- \_\_\_\_\_
- i. What is the impact on the landscape of using this inheritance system? \_\_\_\_\_
- \_\_\_\_\_
- ii. What is the effect on the landscape if primogeniture is NOT used? \_\_\_\_\_
- \_\_\_\_\_
10. Traditionally where did most farmers live in relation to their farmland? \_\_\_\_\_
- a. What kind of settlement which is the most common rural residential pattern GLOBALLY in agricultural regions? Describe. \_\_\_\_\_
- \_\_\_\_\_
- b. How is the settlement pattern in the American Midwest different? Why? What is this called? \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- c. What buildings might a prosperous American homestead include? \_\_\_\_\_
- \_\_\_\_\_

11. Briefly sketch the five village forms (Fig. 11.13). Provide any details about their purpose/primary location below the sketch.

Linear	Cluster	Round	Walled	Grid