**ISSUES FOR COMMERCIAL FARMERS**

1. Complete the attached sheet on the von Thünen model from your reading of page 356.

2. How have efficient agricultural practices, fertilizers, and mechanical equipment, etc. created a problem for commercial farmers?

3. Read “US Government Policies” (p. 357) and complete the bullet chart which highlights current ways in which the US Government currently deals with excess agricultural capacity.

   **US GOVERNMENT POLICIES**

   - 
   - 
   - 
   - 

4. What are the two principal practices that distinguish farmers practicing *sustainable agriculture* from those operating conventionally?
   i. 
   ii. 

5. List three advantages of *ridge tillage*.
   a. 
   b. 
   c. 

6. In what ways are animals treated differently in *sustainable agriculture*?

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**ISSUES FOR SUBSISTENCE FARMERS**

7. The “Boserup Thesis” considers a change in land use among shifting cultivators that could be described as (see text p. 358):

   ![Forest Fallow](https://example.com) → ![Multicropping](https://example.com)

   What is basically happening?
8. How does the increasing population play both a negative and positive role?

**NEGATIVE**  **POSITIVE**

9. What is the **dilemma** that is faced by LDCs as they seek to increase the amount of export crops to sell to MDCs?

10. Some LDCs turn to the production of drug crops for export. The geography of these crops is distinctive. Identify the countries associated with the crops below.

<table>
<thead>
<tr>
<th>Coca leaf</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td></td>
</tr>
<tr>
<td>Opium</td>
<td></td>
</tr>
</tbody>
</table>

**STRATEGIES TO INCREASE FOOD SUPPLY**

11. Four strategies have been proposed to increase the world’s food supply in places where populations are underfed.
   - Expand current _________________ land.
   - Increase agricultural _________________.
   - Identify new food _________________.
   - Increase _________________ from other countries.

12. There is little new land actually available for farming. In fact, the current trend is to reduce agricultural land rather than increase it. Identify and briefly describe three reasons why **land is currently being removed from agricultural use**.
   a. 
   b. 
   c. 

13a. List the two main practices of the **Green Revolution**.
   i. 
   ii. 

13b. Because of the Green Revolution, agricultural productivity at a global scale has _________________ _________________ than _________________ _________________.

13c. Describe the characteristics of the “**miracle wheat seed**.”

13d. Describe the characteristics of the “**miracle rice seed**.”
13e. What specific problems do farmers in LDC’s have which might prevent them from taking full advantage of the green revolution?

14. List and briefly describe one problem with each of the strategies for increasing the world’s food supply by identifying new food sources.

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
</tr>
</tbody>
</table>

4a. What are the three top export grains in the world?

4b. Use map on p. 481 and list the five largest grain exporting countries.

4c. Shade and label five of the largest grain importing countries AND show what country(ies) the imports are coming from.