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National Council for
Geographic Education

Three for Three

Week 20, Unit 5
January 27, 2020

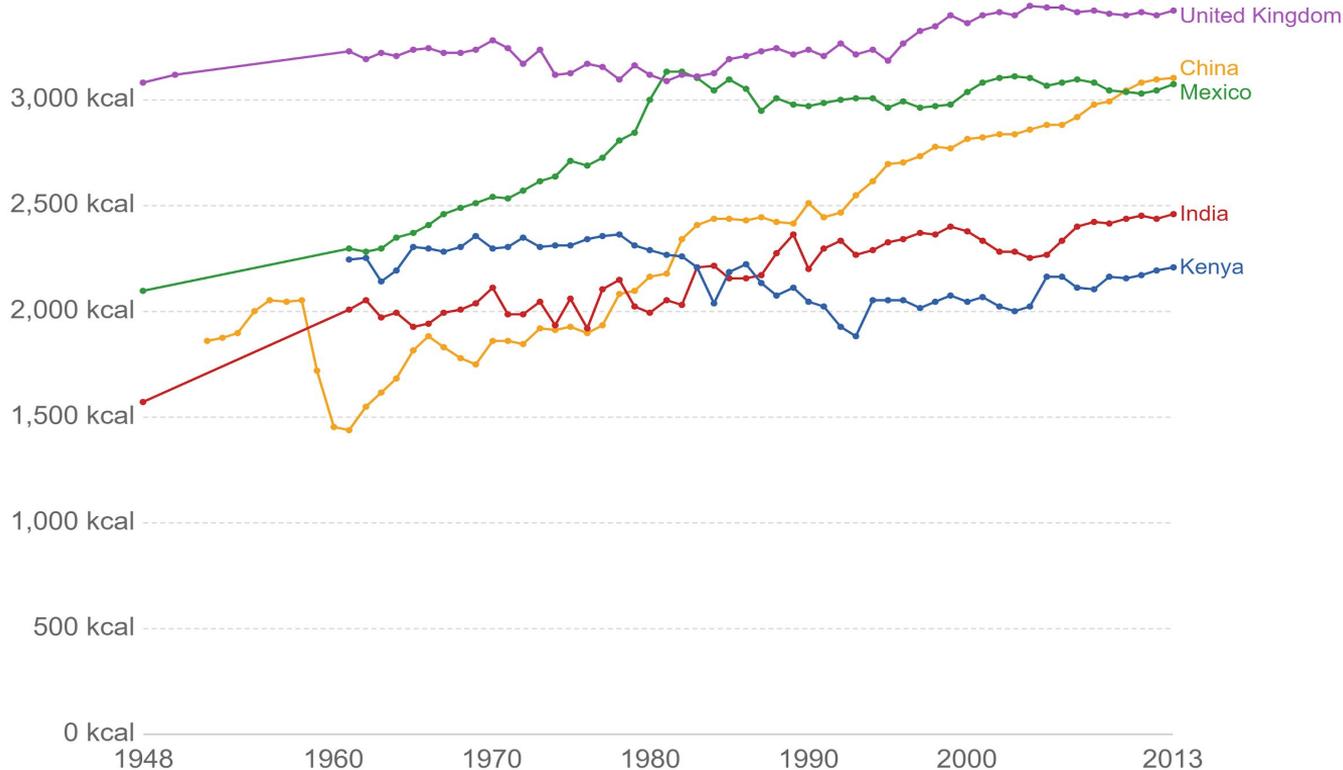
A SUPPLEMENT TO THE WEEKLY APHG BELL RINGERS SERIES
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The Green Revolution Topic 5.5



Daily per capita supply of calories

Our World
in Data



Source: FAO (2017) & various historical sources (see Sources tab)

OurWorldInData.org/food-per-person/ • CC BY

1. Explain the general trend illustrated by the graph.
2. According to data in the graph, which country appears to have been affected first by the Green Revolution?
3. According to the data in the graph, which country appears to have been affected least by the Green Revolution?

Agricultural Production Regions Topic 5.6



Associate each agricultural production region with terms from the categories on the right; name a specific agricultural product associated with each; and specify a region in the world it can be found.

dairy
grain
livestock ranching
market gardening
Mediterranean
mixed crop & livestock
pastoral nomadism
plantation
shifting cultivation
wet rice dominant subsistence
wet rice not dominant subsistence

economic purpose:

- ★ subsistence
- ★ commercial

farming practice:

- ★ intensive
- ★ extensive

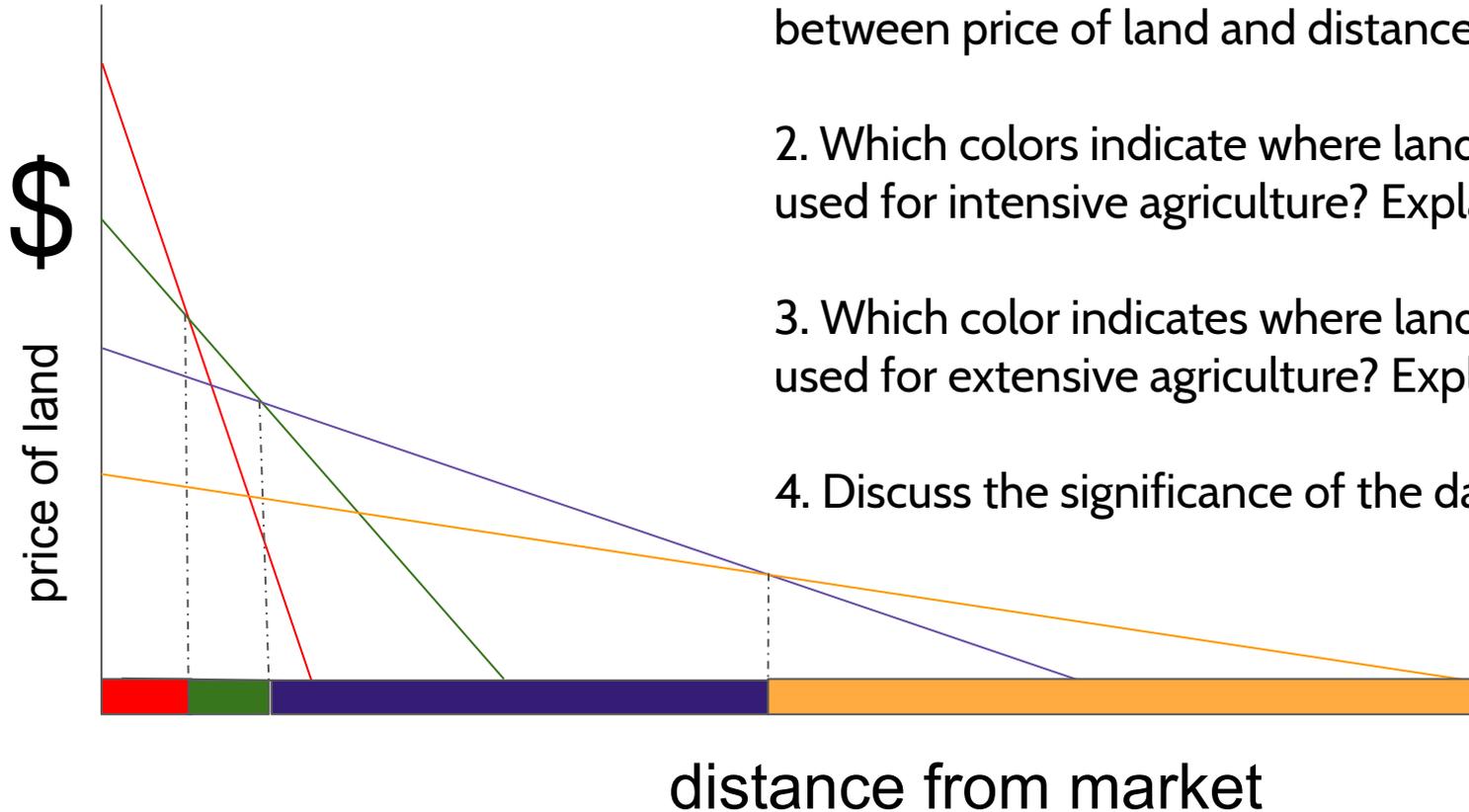
primary focus:

- ★ crops
- ★ animals

predominant climate:

- ★ cold
- ★ dry
- ★ highland
- ★ polar
- ★ tropical
- ★ warm

Agricultural Production Regions Topic 5.6



1. Discuss the relationship as depicted in the graph between price of land and distance from the market.

2. Which colors indicate where land is more likely to be used for intensive agriculture? Explain why.

3. Which color indicates where land is more likely to be used for extensive agriculture? Explain why.

4. Discuss the significance of the dashed vertical lines.

IDEAS FOR SLIDES

SLIDE 1 source: created by Laura Kmetz using information on ourworldindata.org

Use this slide to teach about the second and third agricultural revolutions.

1. Over time, there has been a general increase in calories consumed per capita.
2. Mexico
3. Kenya (Discuss reasons Sub-Saharan Africa was less affected by the Green Revolution than people in S/E/SE Asia.)

SLIDE 2 Use this slide to associate agricultural production regions with information about each. Check the CED and maps in your textbook if you need help with the answers.

SLIDE 3 Graph created by Laura Kmetz. I have my students draw this graph using different colors. They construct the graph, use four different colors to draw four lines (randomly spaced), then draw the vertical lines and shade in the distance from market bars on the horizontal axis. Use this slide to introduce bid rent theory and discuss it in the context of von Thunen. Suggested answers:

1. The two are inversely related. As the distance from the market increases, the price of land decreases.
2. In intensive agriculture inputs--which includes land costs--are high relative to the size of land being used. According to bid rent theory, the land closest to the market tends to be more expensive. Therefore, the red (and to some extent the green) area is more likely to be used for intensive agriculture.
3. In extensive agriculture inputs--which includes land costs--are lower relative to the size of land being used. According to bid rent theory, the land closest to the market tends to be more expensive. Therefore, the orange area is more likely to be used for extensive agriculture.
4. The dashed lines indicate where land use is likely to change. The lines on the graph indicate what a farmer (or anyone else, in the case of units 6 & 7) is willing to pay at a particular distance from the market. The vertical lines indicate where the uppermost line on the graph intersects with the next uppermost line. At this distance is where the land use is likely to shift from from one use, such as grain (here represented by purple), to another, such as livestock grazing (here represented by yellow).

Please feel free to email me at laura.kmetz@gmail.com if you would like this slide in an editable Google slides format.



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