Unit V: Agriculture, Food Production, and Rural Land Use

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*Students should always be prompted, probed, so to speak, to answer the WHY question when responding to geographic inquiry 😊

**Question #1:** Identify the climate region represented by this agricultural region map. Name two-three crops grown in these areas of the world that, when processed, become more valuable.

They are all areas having a Mediterranean climate (moderate temperatures, erratic precipitation in winter, dry summers and varied topography). This area is good for growing crops with deep roots, scant foliage, and thick skins such as: grapes (wine); olives (olive oil); citrus fruits (juices); wheat (bread), tomatoes (sauce), etc. All of these final products relate to the concept of value added (see food items noted above within parentheses).

*Mediterranean climate region: vyturelis.com

*Great potential for an FRQ here. Just take out the word Mediterranean from the map and ask students for type of agriculture represented, examples of crops and then to discuss concept of value added and how it might be represented by those same crops?

**Question #2:** What are the pros and cons of the Green Revolution? In your answer identify specific places where the Green Revolution has been effective and where it has not been effective.

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<thead>
<tr>
<th></th>
<th>Economic</th>
<th>Environmental</th>
<th>Political</th>
<th>Ex. Place</th>
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</thead>
<tbody>
<tr>
<td><strong>Pros</strong></td>
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<tr>
<td><strong>Cons</strong></td>
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Here is a short student made video which gives a nice overview on the purpose of the Green Revolution and its benefits and…disadvantages. The Green Revolution: Waging a War against Hunger: https://www.youtube.com/watch?v=HucSCNQ01X4 (10:04)

*More great FRQ potential. Define Green Revolution. Identify regions and then elaborate as to pros and cons. There was a FRQ on this topic for year 1 of our course so it might be time for an upgrade 😊
Question #3: What are the factors which reflect the changing nature of the dairy and organic food industries over the past 30+ years? Use specific locations as part of your response.

Here is the actual Free Response question from the 2009 exam: FRQ #3 @ https://secure-media.collegeboard.org/apc/ap09_frq_human_geography.pdf

Agriculture in the United States has changed significantly in the past few decades.
With respect to the past, present, and projected trends in agriculture, answer the following:

A. First identify and then explain TWO factors contributing to the steady decline in the number of dairy farms since 1970.

B. First identify and then explain TWO factors contributing to the increase in the number of organic farms since 1970.

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Potential student responses include: Mechanization, agribusiness, vertical integration, land use, cultural and environmental impacts, etc… Students could use the ESPeN acronym representing Economics, Social, Political and Environmental as a basis for completing their analysis.

Question #4: *According to an article published on February 11, 2015 in the British newspaper The Independent, the world has entered an era of “peak food” production with an array of staples from corn and rice to wheat and chicken slowing in growth – with potentially disastrous consequences for feeding the planet. Predict the areas of the world where this will be felt most acutely and justify your choices.

*Article is five years old but still very relevant for the purposes of class discussion and what students need to know to be successful on APHG exam.

Article link and associated data/images @ http://www.independent.co.uk/environment/have-we-reached-peak-food-shortages-loom-as-global-production-rates-slow-10009185.html

As an extension ask students to make connections between the findings in this article and the geographic ideas and theories related to food production put forth by Thomas Malthus, Esther Boserup and Benjamin Franklin.

Question #5: This is a quote from the Alaska Salmon Industry: “Friends don’t let friends eat farm raised fish.” What are possible responses by other stakeholders in this debate? Are there additional stakeholders not represented?

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<tr>
<th>Stakeholder</th>
<th>Slogan/Quote</th>
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<tbody>
<tr>
<td>Alaska Salmon Industry (wild salmon catchers and processors)</td>
<td>“Friends don’t let friends eat farm raised fish”</td>
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<tr>
<td>Fish farmer</td>
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<tr>
<td>Ocean environmental scientist</td>
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<td>Individual fish consumer</td>
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<td>Restaurant chef</td>
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2017 Article on how Alaska’s Salmon Industry is embracing global competition @ https://www.pri.org/stories/2017-09-19/instead-fighting-global-competition-alaskas-salmon-industry-reluctantly-embracing

Questions like this fit within the political ecology approach to geographic inquiry. Students need some background knowledge about why aquaculture is such a contentious issue in today’s modern commercial agricultural landscape which they can draw from their discussions of other agricultural practices.

TED video: http://www.ted.com/talks/dan_barber_how_i_fell_in_love_with_a_fish.html
From February 2010 and one of Ken’s favorite TED talks © It is awesome and even though dated, REALLY interesting!
Chef Dan Barber: How I fell in Love with a Fish? (19:02)

A more recent TED talk from 2016 on the case for Fish Farming @
https://www.ted.com/talks/mike_velings_the_case_for_fish_farming/discussion (15:19)