

URL: http://esriurl.com/humanGeoInquiry10

**APHG: I.B2. Students will analyze landscapes to understand human-environment relationships.
APHG: 5.A1. Students will investigate the connections between agricultural practices and the alteration of the natural environment.**

• Students will identify differences in the distribution of arable land on a global scale.

• Students will use imagery to analyze differences in rural land use and the alteration of the natural environment.

**Where are the world’s agricultural lands located?**

➙Click the map URL above to start the map.

**?** What does arable mean?

*➙*Click on a country to reveal its pop-up.

**?**Using the World Agricultural Lands legend, which countries have over 60% arable land?

**?**Which country’s data are surprising?

**?**How does Saudi Arabia increase its agricultural land?

**?**Which large countries have under 15% arable land?

**?**Why do Russia and Canada have low percentages?

**Where are agricultural lands in the United States?**

**?**What is the percent of agricultural land in the United States?

**?**How has that percentage changed over time?

➙With the Details button underlined, click the button, Show Contents of Map (Content).

➙Check the box to the left of layer name, USA Land Cover (2011). Click the layer’s name to see the legend.

➙Uncheck the layer, World Agricultural Lands.

**?** Which colors indicate farming?

➙Click the button, Bookmarks. Select United States.
**?** Where are large areas of farms located?

**How do rural landscapes within the United States differ?**

➙Click the button, Basemap. Select Imagery.

➙Turn on the layer, USA Land Cover (2011).

➙Click the button, Bookmarks. Select Kansas.

**?** What patterns do you observe?

➙Toggle between the land cover and image layers.

**?**Does the land cover map confirm agricultural land use?

**?**What new crop category appears?

➙Click the button, Bookmarks. Select Louisiana.

**?**What do you observe?

**?**What other land cover category is in this area?

**How does land use differ between rural and urban areas?**

The Great Dismal Swamp National Wildlife Refuge protects 112,000 acres of forested wetlands.

➙Click the button, Bookmarks. Select Dismal Swamp 1.
**?** What do you observe?

➙Click the button, Bookmarks. Select Dismal Swamp 2.

➙Zoom and pan the map.

**?** What do you see?

➙Click the button, Bookmarks. Select Chesapeake.
**?** What do you observe?

**How has human action affected rural areas?**

**?**How has irrigation affected rural areas?

**?**What are some possible negative aspects of the expansion of agriculture?

**?**How are cities changing rural areas?