# How Sustainable is the United States’ Food System?

*The United States is the world’s leading producer of commodity crops and processed foods. Thanks largely to this abundant production, the average American family is able to spend less than 10% of their income on food – a fact that contributes considerably to American’s affluence. However, concerns are growing that America’s food system is too dependent on fossil fuels and has perilous hidden costs.*

*“King Corn” and “Big River” are informative, yet entertaining documentaries that explore these issues. The 90-minute“King Corn” should be watched first in its entirety; viewing can be broken up into two or three segments. “Big River” is a 30-minute sequel. The following questions can guide your exploration.*

**“King Corn”**

1. The carbon in Ian and Curt’s hair is from corn. How did it get there? Trace the pathways through the principles foods in their diet.
2. Describe how farming has changed since the days of Curt and Ian’s grandparents.
3. Corn yields more than quadrupled since the days of Curt and Ian’s grandparents. Why? Describe at least two developments that account for this.
4. Michael Pollan describes modern corn as “an urban creature”. What does he mean by this and how does it affect farming practices?
5. What is crop rotation? How did this practice benefit the soil? How and why has corn farming strayed away from it?
6. Curt and Ian grew a “Liberty Link” variety of corn that was tolerant of glyphosate herbicide. In what sense has Liberty Link technology helped to make this corn production system more sustainable? How does this compare with sustainability of organic farming practices?
7. Where does corn go after harvest? Map out the pathways.
8. Why does the U.S. government subsidize corn production? Is this good or bad for the system?
9. What is your reaction to Ian and Curt’s visit with Earl Butz?
10. Map out the connections between the U.S. farm policy and…
    1. Changes in the town of Greene, Iowa.
    2. The prevalence of diabetes in the US population.

**“Big River”**

1. What is causing the dead zone in the Gulf of Mexico? How does this relate to farming practices in Iowa? What is your assessment of the shrimpers’ and farmers’ perspectives on this problem?
2. How might the seemingly higher incidence of cancer in Greene, Iowa be linked to corn production? Why can’t we be sure that this is a cause-effect relationship?

**Formulating a More Sustainable Solution**

Discuss with your team your answers to the above questions. Use this as a basis for identifying key sustainability problems and potential solutions. Together draft a one-page “mini-proposal” outlining what it would take to create a more sustainable system. Be sure to explain how your proposed solutions address specific problems and to identify some realistic measures (such as incentives) that could be taken to achieve them. Be prepared to present your proposal and defend (answer questions about) it in class.