

Future of Food

Agriculture: Then and Now

Society and cultures revolve around food. There are television networks solely focused on food and it is almost impossible to take a drive without passing a fast food chain. Billions of dollars are spent annually to market and advertise food. Around the world, demand for food, specifically protein sources, is increasing without a foreseeable stop. Therefore, agricultural practices have changed to increase production and meet consumer expectations in countries with increasing populations, reduced arable land and fewer farmers. Unfortunately, those same countries also have a large percent of food go to waste.

Questions:

How do you think a typical farm in the 1900's looked? Draw or diagram below...

How do they differ from farms today? Draw or diagram below...

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Look at the cartoon below:



What is happening in the cartoon?

What do you know about this phenomenon?

Do you think it is happening in Ohio? The United States? The world?

We'll come back to this idea before the end of the unit.

History

In the early 1900's, farming was a common practice in America. Agriculture was the focal point of the economy, and there were numerous small scale farms. Roughly 22 million work animals were used for production, and each farm grew around five different commodities. However, there was a significant decline in the number of farms following the Great Depression and the beginning of World War II, as America began to be more industrialized. The increased usage of machinery (such as tractors and cotton pickers) increased crop yield and allowed for farmers to manage larger farms. This more efficient, mechanized work saved physical labor costs and also allowed farmers to deal with the reduction of workforce.

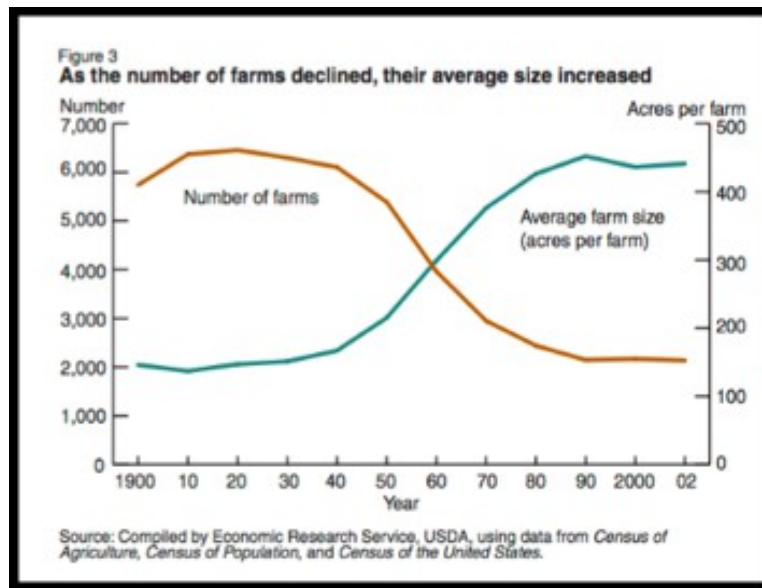
According, to the 2012 Census of Agricultural Farm Typology, 97% of all U.S. Farms are family owned. These farms are producing higher yields with less inputs and a smaller labor force. It is estimated that the number of farms has decreased from about 6300 farms at its highest in 1920, to about 2100 by 2002, while the average farm size has increased from 140 acres in 1900, to 430 acres in 2002.

What is the percent decrease in of the number of farms?

What is the percent increase in of average acres per farm?

According to these numbers, are there fewer or more farmed acres now on average?

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http://www.ers.usda.gov/media/259572/eib3_1_.pdf

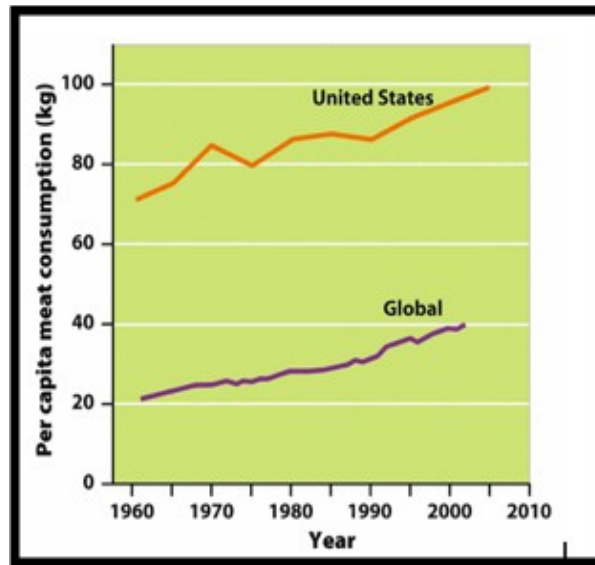
By utilizing modern farming practices and resources such as monocropping, irrigation, fertilizers, pesticides, and large scale livestock operations, production has increased and the agricultural market is able to continue to meet the demand of consumers.

-Take the e-learning course on **Modern Agriculture Practices** to learn more about these methods.

In emerging economies, the story of agricultural development is a little different. They do not have the financial means to purchase large machinery or pesticides and fertilizers to make farming production more efficient. Nor do they have the infrastructure in place to move goods to markets. Therefore, similar to early American agricultural practices, they rely mostly on physical labor on small scale, local farms. 50-90% of employees work in agriculture in developing countries, whereas less than 5% of workers in America are in the agricultural workforce.

These differences are created by the significant financial gap between more economically developed countries and less economically developed countries. If the standard of living increases in these developing countries, the economy will grow since more people will be able to afford more goods - not only agricultural products, but also other products. This will create a chain reaction and allow them play a larger role in the global market and interact with consumers from all around the world.

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Friedland, Environmental Sciences AP Textbook (look up)

Questions:

Analyze the two lines on the graph above.

What can you infer - think politically, socially, and economically?