



**00:01**

*Bob Bain, PhD, University of Michigan  
Three contrasting artworks depicting farmers, herders, and artisans; a drawing of women working at industrial machines*

In 1750, most people were still farmers, herders, and artisans—people who produced food, and made things, typically with their hands. Looking back, we call their system of production and distribution “pre-industrial.” This term recognizes a transformation that was about to come—the Industrial Revolution, a dramatic change in how food and goods were made and distributed.

**00:30**

*Art depicting different parts of food production: farming, hand-processing, working in a barn with the livestock*

For most people, food production in 1750 still looked a great deal like it had for thousands of years. An individual, or a family, working in a field, sowed grain or planted tubers or maybe a few vegetables; weeded them; protected them from bugs, birds, and beasts; and directed water to them. They were then harvested and processed by pounding, grinding, and cooking. Other people took care of livestock, hunted, or fished. Sometimes these food-producers worked their own land, or land that belonged to their families. Equally often, they worked land that belonged to others, like a land-owner or a noble.

**01:09**

*Painting depicts artisans weaving cloth on a loom*

A much smaller group of people were artisans. They had some expertise and some tools that allowed them to turn animal skins into clothing, mineral into iron, or trees into lumber. A much, much smaller group were wealthier. These people were merchants, nobles, or educated professionals of one sort or another. Some people could move between these groups, or live entirely outside of them, but that wasn't very common.

**01:35**

*A painting of a plantation: poor workers tend the land while wealthy men watch over*

This isn't to say that no one had ever tried to make more goods for less money, or that production and trade hadn't changed at all for thousands of years—for example, the plantation systems of European colonies; Song dynasty porcelain in China; Roman silver mines in Iberia. These and many other earlier societies had developed new organizational techniques over several centuries to produce and distribute goods faster, better, and wider than before. But these were organizational achievements. They were improvements that used technologies that were only a little better than what came before. And they used the same energy sources: the sun, humans, animals, wind, and water.

**02:18**

*Painting of a factory – black and grey smoke pours from the chimneys; dirty waste water pours into the sea; painting of a machine cutting lumber*

Beginning around 1750, however, the Industrial Revolution turned this system on its head. Use of chemical energy from coal, or later oil, to do lots of automated work very fast began the transformation that would lead to fewer and fewer farmers, herders, and artisans.

**02:37**

Slowly, most people became workers. They worked in gangs or shifts in factories, or on trains and steamships that transported industrial goods. Fewer people ate food they had produced themselves, buying it in a store instead. Fewer artisans existed to hand-craft special tools or products, which were instead made in stages by dozens or hundreds of people working together.

*Photo of a factory filled with identical, small work stations*

**03:15**

*Comic depicts factory owners as giants, sitting on top of their land as if it were a board game. A 1929 ad for an electric washer.*

**04:00**

*Photos: a very small child amid giant factory machines; women working in a crowded factory*

Of course the changes created by the Industrial Revolution didn't happen everywhere overnight. They began in a few places, affecting select groups of people. But soon change began to spread and spread.

You see, industrialized societies had a big advantage over non-industrialized societies. They could be spectacularly productive. This meant that fewer people could produce more things in less time. An automated factory, driven by chemical energy, could produce more than could individual people working with hand tools, and it could do so more cheaply. This increased profit for its owners, and it provided more products for consumers to buy. All this was attractive to people who made economic decisions, or even just wanted to become wealthy. And many of these people had the ability to change laws to suit them, to create political and legal systems that favored industrialization.

The Industrial Revolution created the world of our parents, grandparents, and great-grandparents—most of whom worked in mines and factories or on industrialized farms. Today, of course, things are changing again. Other revolutions are taking place. But our lifestyle remains in many ways an industrialized lifestyle. Understanding how that happened can help us to think about what it means to live with the Industrial Revolution today.