

**INDUSTRIAL REVOLUTION!**





# TODAY'S GOAL:

Analyze the causes for the Industrial Revolution

Understand why it began in Great Britain

# BEFORE 1750

Life was primarily rural

Short life expectancy

- Men 31 years
- Women 33 years

Feast and famine

- Availability of food depended on success of crops every year

Limited trade

- (because of transportation)



# CAUSES OF THE INDUSTRIAL REVOLUTION

## Agricultural Revolution → More food

- Enclosure movement → unemployed farmers

## Population Growth

- Unemployed farmers → labor force for factories

## Materials

- Location Location Location

## New Technologies → Steam & Coal

- Transportation, powered industries

# AGRICULTURAL REVOLUTION

Agricultural Revolution made the Industrial Revolution possible

## Agricultural Revolution:

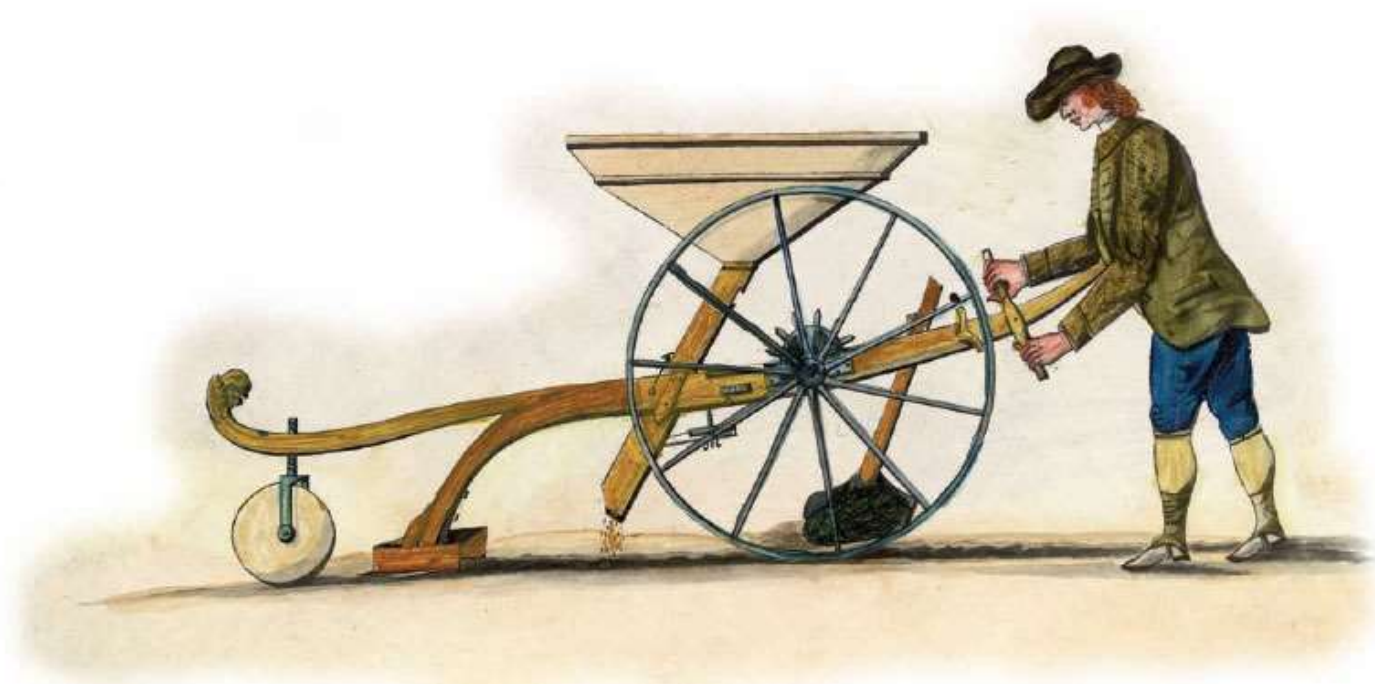
- Drastically improved farming
- Made it possible for fewer people to produce food for many more people



# NEW FARMING TECHNOLOGIES

New technologies like the Seed Drill added farming.

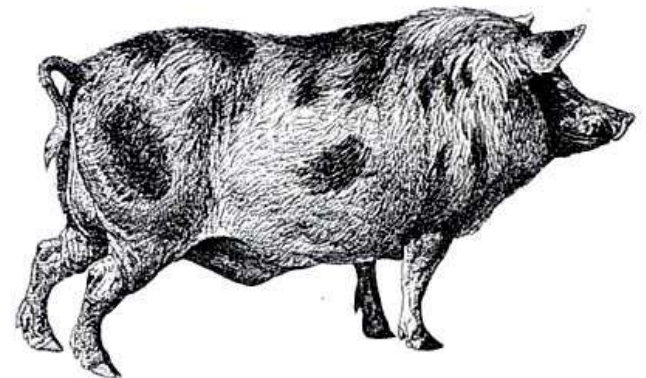
Fertilizer was invented



# AGRICULTURAL REVOLUTION

Made possible by:

1. **Enclosures:** Large farms with better seeding and harvesting methods
2. **Crop Rotation:** Changing crops every year to improve the land
3. **Livestock Breeding Improvements:** Only breeding best animals

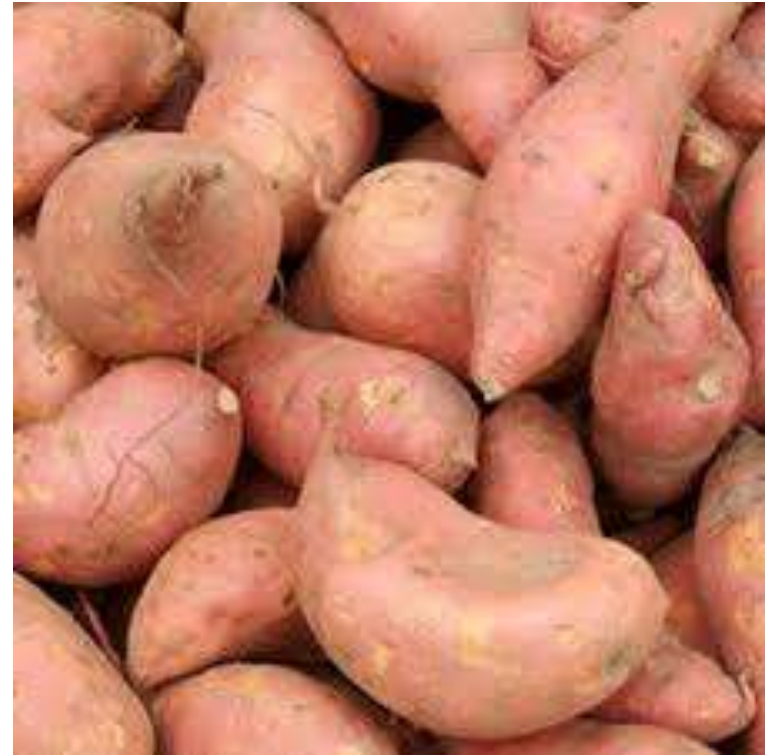




# RESULTS OF THE AGRICULTURAL REVOLUTION

Improved food  
production

Surplus of food!





# BEGINNINGS OF INDUSTRIAL REVOLUTION

## 1<sup>st</sup> phase:

- Began in England mid 1700's



# ENGLAND

England had all the factors of production:

- **Land**
  - Bountiful natural resources
- **Labor**
  - Displaced farmers, growing population
- **Capital**
  - Wealth – money to invest in industry



# LAND

Britain had an abundance of natural resources

- Resources: iron ore, coal, etc.
- Water power and coal to fuel machines
- Rivers/Canals for transportation and accessibility for trade
- Sea: able to transport goods cheaply because they had good access to sea ports all around the Island

# LABOR

The Agricultural Revolution had increased England's population

- Greater food supply = population increase

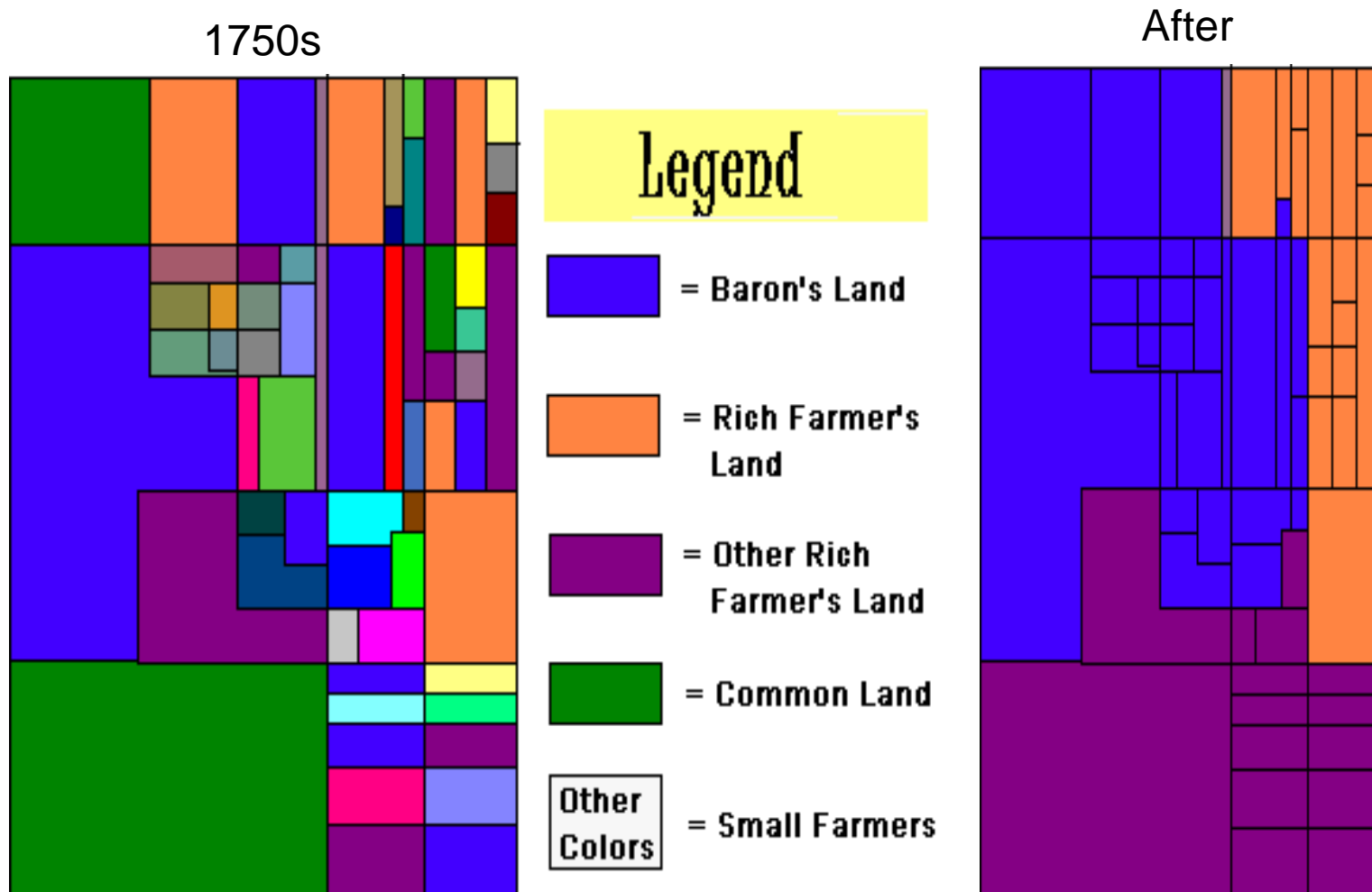
1700's European population reaches 190 million

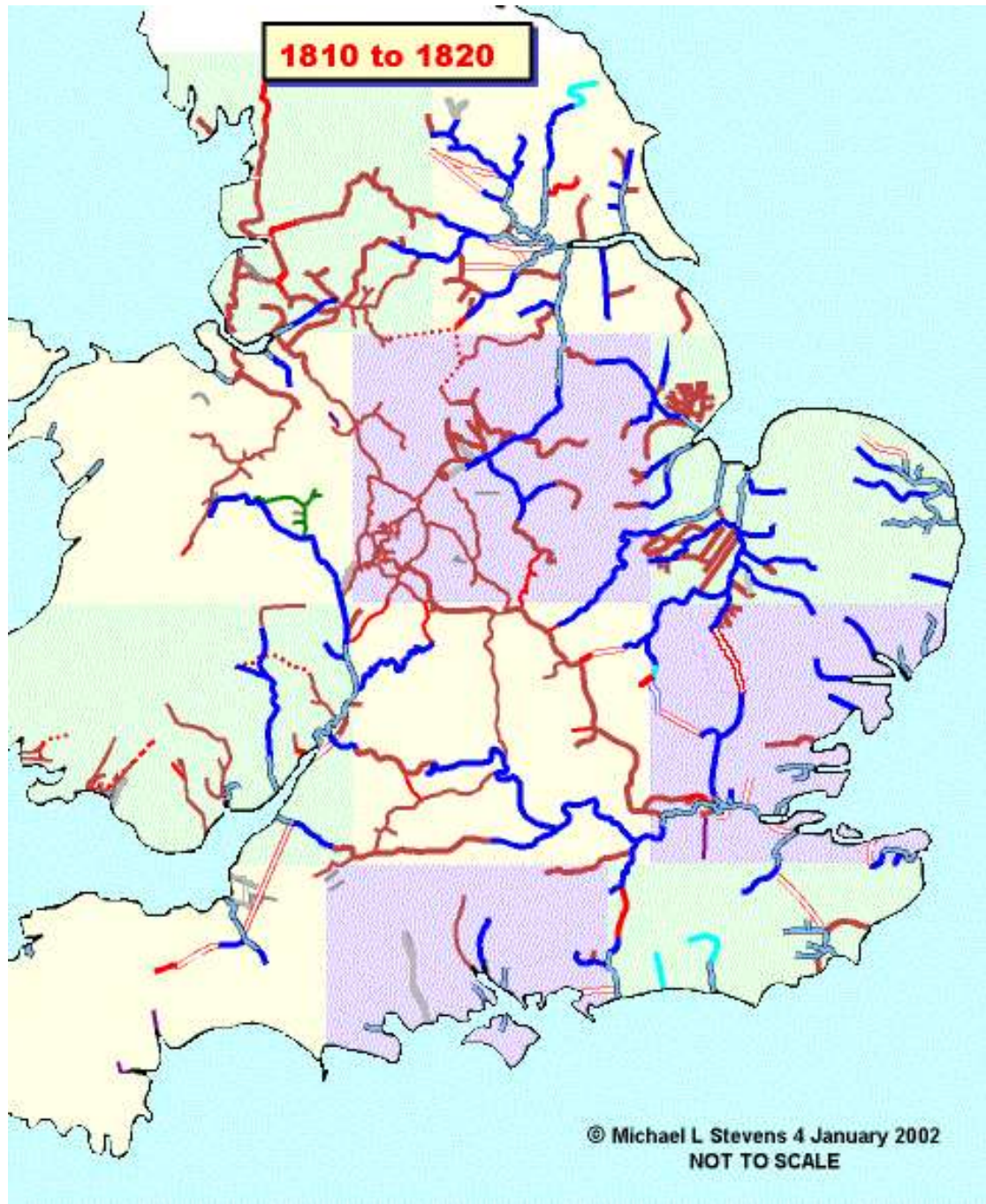
- People eat better, healthier babies, better medical care

Unemployed Farmers - lost enclosed lands → moved to cities; need jobs!

# ENCLOSURES

Fencing off large tracts of land making farming more efficient





# CAPITAL

Money to invest in labor, machines and raw materials.

Entrepreneurs – brought together labor, capital and raw materials – took risks





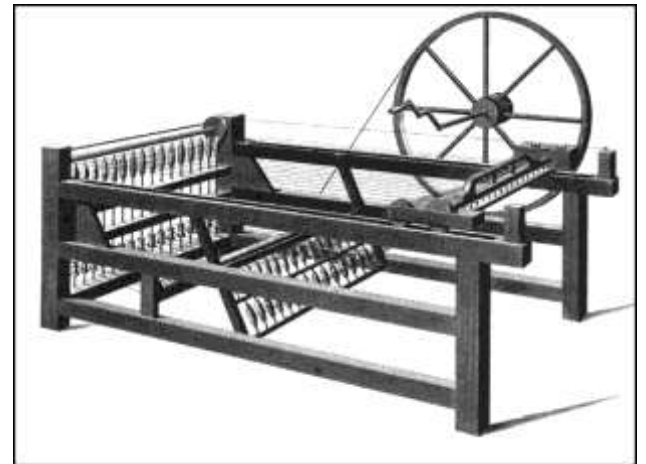
# INVENTIONS

## New inventions drive Industrial Revolution

- Textile Industry
- Flying shuttle and spinning jenny

## Steam Engine

- Power for industry
- Power for trains and boats



# TEXTILE INDUSTRY

## Inventions speed production of textile goods!

- Demand for textile goods high, inventors, needed to invent machines to speed up the process.
- **Flying Shuttle:** Weaving machine
- **Spinning Jenny:** Spun many threads at the same time; hand-powered
- **Water Frame:** spinning machine powered by water.

# RAILROAD SYSTEM

Four major impacts:

1. Spurred growth of industry
2. Created jobs
3. Boosted farming/fishing industries
4. New way for people to get around



# RISE OF CITIES

Industrial Revolution gave rise to urbanization

- Rapid growth of cities

Fun fact:

- The number of European cities with populations 100,000+ more than doubled between 1800-1850



# FACTORIES AND GROWTH OF CITIES

New large machinery needed new large building to fit into.

Most factories were built close to energy sources

- Water
- Coal

Industrial centers emerge