

I Development and Diffusion of Agriculture

A. Defining Agriculture

1. Most people practice agriculture, the growing of plants or raising of animals, in order to produce food for sustenance for sale at the marketplace.
2. Prior to the domestication of plants, humans were primarily nomadic hunters and gatherers, unable to settle in one place for too long before they had to move on to new food resources.
3. Today, farms provide humans with the ability to stay stationary and build cities.
 - Less than 250,000 people in the world are hunter/gatherers.

B. Subsistence vs. Commercial Farming

1. Despite the widespread adoption of agriculture, there are substantial differences in the way developed and less developed countries farm.
2. Subsistence farming is when a farmer can grow only enough food to feed his/her own family. In many less developed regions of the world people are subsistence farmers.
3. Commercial farming is when farmers grow food to be sold in groceries and markets, not just to be eaten by farmers.
4. In more developed countries like the U.S. most farms are commercial farms.
 - Worldwide commercial farms are increasing as subsistence farms are being incorporated into the global farming market.

C. Origins of Agriculture

1. Geographers generally believe that humans evolved from hunters and gatherers into stationary farmers over thousands of years, as humans constantly touched and handled plants in their gathering efforts to feed themselves.

2. Geographers believe that agricultural innovation occurred in and diffused from multiple hearths, or places of origin.

3. According to Carl Sauer, humans first learned how to grow plants in Southeast Asia through vegetative planting, a process simply cutting off a stem of another plant or by dividing up roots of a plant.

- a) SE Asia has a climate and terrain that would have supported the growth of root plants that are easily divided such as taro, yam, banana, and palm.

4. From the SE Asian hearth, this knowledge diffused north and east to China + Japan, and then west towards SW Asia, Africa and the Med region.

5. Other early vegetative hearths are believed to have emerged through independent innovation in NW South America, near the Andes, and in West Africa.

6. Later, humans made the leap in the First Agricultural Revolution to seed agriculture, which is farming through planting seeds, rather than just planting part of the parent plant.

a) Seed Agriculture leads to higher crop yields bc there are so many seeds.

D. The 1st Agricultural Revolution

1. The 1st Ag Rev (Neolithic Revolution) saw humans develop seed agriculture and the use of animals in the farming process 12,000 yrs ago

2. The growth of seed crops, like wheat and rice, and the use of animals, like goats + sheep, replaced the hunting and gathering nomadic lifestyle that had existed since humanity was born.
 3. Human groups were able to stay in one place, grow their populations and start to build communities.
 4. The ability to produce more food without rooming for it increased the carrying capacity of the Earth, which checked the path towards the development of civilization.
 5. 1st Ag Rev believed to have occurred independently in several hearths.
- Crash Course pg 139 (show chart)

E The 2nd Agricultural Revolution

1. After the fall of Rome around 500 CE, farming grew into a feudal village structure.
2. During the Middle Ages, most farmers worked their lands to feed themselves and their families in an open lot system, one in which there was one large plot of community farmland that all villagers farmed to produce a crop to eat.
3. As capitalism grew, feudalism diminished and villages enclosed their farmland.
 - a) The enclosure movement gave individual farmers their own plots of farmland, marking a major shift in agriculture.
4. Geographers still debate where and when the 2nd Ag Rev began, although nearly all agree its most influential phase coincided with the Industrial Revolution in 17th + 18th century England and Western Europe.
5. The growing industrial economy and the decline of feudal villages in the 1600s and 1700s caused massive urban migration, as former farmers moved into cities looking for work.

a) This wave in urban migration caused a great jump in the demand for food to be shipped into cities for the workers.

6. With this demand came new innovations in farming and transportation technology that dramatically increase crop and livestock yields.

a) New agrarian (farming) tech was invented, such as a better collar for oxen and the use of the horse instead of the ox on the farm.

b) New fertilizers, field drainage and irrigation systems, and storage systems were invented to help increase farm outputs.

7. Higher farm outputs also encouraged the population boom that accompanied the Industrial Revolution.