

Unit 4

Agricultural and Urban Revolutions

Section 1

Unit Materials

Questions To Consider

Question 1.

What are some of the different patterns by which human societies around the world domesticated plants and animals?

Question 2.

When did human societies begin to settle down in urban centers, and what was early urban life like?

Question 3.

When human societies became more complex, how did this affect the ways people thought about social differences such as gender, status, and class?

Question 4.

What impact did urban technologies such as metallurgy and pottery-making have on the environment?

The Big Picture

How is this topic related to Increasing Integration?

All early agricultural societies shared a common need to feed their growing populations.

How is this topic related to Proliferating Difference?

The movement to an agricultural, urban life followed many different patterns in different parts of the world. In addition, as these societies became bigger and more complex, they all increasingly differentiated individuals on the basis of gender, class, and status, which led to greater social and economic inequalities.

Unit Purpose

- The movement from hunting and gathering to agriculture followed many different, independent paths all over the world in response to a variety of specific environments.
- The movement to agricultural life was usually more difficult and labor intensive than hunting and gathering. Once established, however, agricultural societies could support larger and more complex societies than hunter-gatherer societies.

- As settled societies grew larger, they became both more socially unequal and more destructive to local environments.

Unit Content Overview

For tens of thousands of years, humans survived by foraging and hunting. Then, about 10,000 years ago, they began to settle down in permanent communities. Scholars refer to this transition as the Neolithic Revolution. This revolution was not sudden, however: It took place over thousands of years and in many different places. Its course, therefore, followed many different patterns and cannot be explained through any single model.

This unit explores the transition to agriculture and then to urban life between 10,000 and 2,000 years ago. Efforts to track this transition by pinpointing the earliest agricultural crops, however, have been hampered by the nature of the plants themselves. Cereal grains, which are hard-shelled, were often burned (carbonized) during preparation and were thus preserved in archaeological deposits. Root crops like yams and potatoes, in contrast, lack hard, burnable parts, making their preservation unlikely. Because of this, it is possible that root crops could have been domesticated even earlier than cereal crops. Bearing these limits of interpretation in mind, it seems clear that during the Neolithic period relatively large populations dependent on grain-based agriculture emerged in nearly every distinct geographic areas of the world. Deliberate agriculture, in turn, gave rise to impressive population increases. The resulting pressures caused by rising population then led to the spread of agricultural peoples to new areas of the world.

Although no comprehensive model can explain the transition to agriculture in all or even most societies, it is safe to say that the nature of this transition in every society was conditioned by the characteristics of specific physical environments. It is also clear that the transition to agriculture nearly always involved a movement toward greater social complexity. This complexity usually meant increasingly sophisticated means for controlling and exploiting environments to achieve greater food production, technological innovation, and social stratification. As populous, agricultural areas became urban centers, they were increasingly defined by the power and privilege of those who were able to exert their authority and control over others. Such hierarchies resulted in intensified inequalities based on gender, class, and status.

Unit References

Michael Balter, "Why Settle Down? The Mystery of Communities," *Science* 282, no. 5393 (November 20, 1998), 1442–45.

Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: W. W. Norton, 1997).

Brian Fagan, *People of the Earth: An Introduction to World Prehistory*, 10th ed. (Upper Saddle River, NY: Prentice Hall, 2003).

John A. Mears, "Agricultural Origins in Global Perspective," in *Agricultural and Pastoral Societies*, ed. Michael Adas, 36–70 (Philadelphia: Temple University Press, 2001).

Clive Ponting, *A Green History of the World*. (1991; repr., New York: Penguin USA, 1993).

T. Douglas Price and Gary M. Feinman, *Images of the Past* (New York: Mayfield Publishing, 1993).

Orrin C. Shane III and Mine Kucuk, "The World's First City," *Archaeology* 51, no. 2 (March/April, 1998).

Global Historical Context

- The Agricultural and Urban revolutions; the role of technology and the environment; diffusion and determinism; our changing views of the past; the role of archaeology.
- Time Period: Foundations, especially 12,000 BCE to 100 CE
- The earliest evidence for the human transition to agriculture dates from about 10,000 BCE, although it is likely that there was experimentation before then. By 5000 BCE agriculture had become well established in several places, including southwest Asia, southeast Asia, east Asia, and the Americas. In this “Neolithic” period — or new stone age — the transition to agriculture depended on climatic conditions and the availability of domesticable plants and animals. As a result, not all of the peoples of the world made, or were able to make, this transition. Once societies shifted to agriculture, social and political life was transformed. Stable, sedentary settlements allowed population growth and the development of more complex social structures. This, in turn, led to the development of social stratification and labor specialization, as well as the emergence of pottery-making, metallurgy, and textile production.

AP Themes

- Explores change and continuity by looking at the ways societies changed as they shifted to an agricultural way of life.
- Examines technology, demography, and the environment in that the transition to agriculture altered all three: it encouraged the development of technologies such as metallurgy, it caused populations to expand, and it changed the natural environment as a result of human interventions.
- Discusses cultural and intellectual developments because the transition to agriculture caused cultures to become more complex and socially stratified.
- Pays attention to changing functions of states because the transition to agriculture was critical in the development of states.

Related Units

- Unit 8. Early Economies: How do societies assign value to land, labor, and material goods? A comparison of manorial economies in Japan and medieval Europe is contrasted with the tribute economy of the Inka, and the experience of dramatic economic change is illustrated by the commercial revolution in China. This unit is related to Unit 4 because it focuses on the economic complexities that resulted from the earlier transition to agricultural, urban societies.
- Unit 14. Land and Labor Relationships: What factors shape the ways in which the basic resources are exploited by a society? From southeast Asia to Russia to Africa and the Americas, the ratios between land availability and the usable labor force were the primary basis of pre-industrial economies; however, politics, environment, and culture played a part as well. This unit is related to Unit 4 because it explores issues of land and agriculture, as well as social equality in the early modern period.
- Unit 16. Food, Demographics, and Culture: What role has food played in human societies? Studying the production and consumption of food allows historians to uncover hidden levels of meaning in social relationships, understand demographic shifts, and trace cultural

exchange. This unit examines the earliest impact of globalization, including changing cuisine, environmental impact, and the rise of forced labor as a global economic force. It is related to Unit 4 because it raises issues about the consequences of trade in food that was made possible by the much earlier development of agriculture.

Section 2

Video-Related Materials

Video Segment 1: Early Settlements

This segment looks at the development of early agricultural societies. It demonstrates how much scholars still have to learn, as well as the variety of ways societies could adopt agricultural practices. In the ancient city of Mergarh, Pakistan, for example, new scientific evidence has caused scholars to rethink previous assumptions about the development and spread of agriculture in western Asia. Until the 1960s, scholars believed that migrants from the West brought with them to Mergarh (in about 6000 BCE) the complexities associated with settled communities — including agriculture and pottery. But in recent decades this story of “diffusion” from the West has been complicated by evidence showing that the people of Mergarh had domesticated local varieties of barley long before migrants brought their varieties to the settlement. This recent indication that agriculture arose independently in Mergarh has helped scholars realize that the story of the transition to agriculture was highly complex and cannot simply be explained by diffusion. Archaeological evidence from Mesoamerica has similarly demonstrated that societies followed many different paths in the transition to agriculture. There, scholars have found that nomadic peoples in central Mexico intensively selected and harvested wild maize, thereby influencing the plant’s genetic makeup. Indeed, it is now clear that societies did not need to be settled in order to participate in agriculture.

Video Segment 2: Agriculture, Pastoralism, and Complexity

Although historians have long tended to view the transition to agriculture as a story of “progress,” life in agricultural societies was often more difficult and more labor-intensive than in foraging and gathering societies. This segment examines the story of the “agricultural revolution” in terms of both its costs and its advantages for humans. On the cost side, raising crops required far more energy than foraging — which usually only took a few hours each day — and also resulted in a less varied diet than in foraging communities. The same is true for the domestication of animals, which required larger amounts of energy than hunting wild animals because of the time required for penning, watering, and protecting tame herds. On the advantage side, however, it is clear that agricultural societies were able to produce more food in smaller areas — which over time enabled them to support larger populations. Aided by technological innovations in metallurgy and pottery-making, these larger populations, in turn, allowed agricultural societies to expand into new regions.

Video Segment 3: Cities and Their Origins

While there were many differences between early agricultural communities, they did share some similarities. Primary among these were increasing social complexity and increasing social inequality. Through the examples of the ancient cities of Anyang (in modern China) and Chavin de Huantar (in modern Peru), this video segment traces the social stratification that resulted from large, complex settlements. In about 1400 BCE, the city of Anyang emerged as a central site of political power in the Shang dynasty. Archaeological evidence found in tombs — including jade and bronze — indicates great distinctions in wealth between the city’s inhabitants. Similar markers of wealth and power have also been found at the ritual center of Chavin de Huantar. However, excavations in the ancient city of Catalhoyuk (in modern Turkey) — settled as early as 7000 BCE — may yet prove an exception to the general rule of increasing inequality within complex societies, as scholars can find little evidence of social stratification despite a large and permanent population.

Perspectives on the Past: Archaeology's Changing Views

What is the role of archaeology in changing our views of the past? How have advances in the field brought new evidence to the attention of scholars? In the last few decades, methods previously unavailable to archaeologists — including DNA analysis, satellite imagery, and ground-penetrating radar — have revealed a vast array of exciting new details about the daily life of ancient people and their material world. And, as archaeological techniques continue to improve, scholars expect to have even more doors in the worlds of prehistory opened to them.

Video Details

Who Is Interviewed

- Candice Goucher
- Peter Winn
- Linda Walton

Primary Source Materials Featured in the Video

- Steve Weber, archaeologist

Program Contents

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