CHAPTER 1: From the Origins of Agriculture to the First River-Valley Civilizations

I. Before Civilization

A. Food Gathering and Stone Tools

1. The period known as the Stone Age lasted from 2 millions years ago to 4 thousand years ago. It is subdivided into the Paleolithic (Old Stone Age - to 10,000 years ago) and the Neolithic (New Stone Age).

2. The diet of Stone Age people probably consisted more of foraged vegetable foods than of meat. Human use of fire can be traced back to 1 to 1.5 million years ago, but conclusive evidence of cooking (in the form of clay pots) can only be found as far back as 12,500 years ago.

B. The Agricultural Revolutions

1. Agricultural Revolutions - the domestication of plants and animals - were a series of changes in food production that occurred independently in various parts of the world. Changes in global climate were probably the cause of these transformations.

2. The first stage of the long process of domestication of plants was semicultivation, in which people would scatter the seeds of desirable food-producing plants in places where they would be likely to grow. The next stage was the use of fire to clear fields and specialized tools to plant and harvest grain.

3. The transition to agriculture took place first and is best documented in the Middle East, but the same sort of transition took place independently in other
parts of the world, including the eastern Sahara, the Nile Valley, Greece, and Central Europe. Early farmer practiced swidden agriculture, changing field periodically as the fertility of the soil became depleted.

4. The environments in which agriculture developed dictated the choice of crops. Wheat and barley were suited to the Mediterranean area; sorghum, millet, and teff to sub-Saharan Africa; yams to Equatorial West Africa; rice to eastern and southern Asia, and maize, potatoes, quinoa, and manioc to various parts of the Americas.

5. Domestication of animals proceeded at the same time as domestication of plants. Human hunters first domesticated dogs; sheep and goats were later domesticated for their meat, milk, and wool.

6. As with plants, domestication of animal occurred independently in various parts of the world, and the animals domesticated were those that suited the local environment. In most parts of the world the domestication of plants went along with the domestication of animals.

7. The agricultural revolutions brought about a significant increase in the world’s human population - from 10 million in 5000 B.C.E. to between 50 and 100 million in 1000 B.C.E.

C. Life in Neolithic Communities

1. Early food-producing societies used megaliths (big stones) to construct burial chambers and calendar circles and to aid in astronomical observations.

2. Most people in early food-producing societies lived in villages, but in some places, the environment supported the growth of towns in which one finds more
elaborate dwellings, facilities for surplus food storage, and communities of specialized craftsmen. The two best-known examples of the remains of Neolithic towns are at Jericho and Çatal Hüyük. Jericho, on the west bank of the Jordan River, was a walled town with mud-brick structures and dates back to 8000 B.C.E.

3. Çatal Hüyük, in central Anatolia, dates to 7000 - 5000 B.C.E. Çatal Hüyük was a center for the trade in obsidian. Its craftsmen produced pottery, baskets, woolen, cloth, beads, and leather and wood products. There is no evidence of a dominant class or centralized political leadership.

4. The art of Çatal Hüyük reflects a continued fascination with hunting, but the remains indicate that agriculture was the mainstay of the economy. The remains also indicate that the people of Çatal Hüyük had a flourishing religion that involved offering of food. Evidence indicates that the religions may have centered on the worship of a goddess and have been administered by priestesses.

5. The remains at Çatal Hüyük and other sites include decorative or ceremonial objects made of copper, lead, silver, and gold. These metals are naturally occurring, soft, and easy to work, but not suitable for tools or weapons, which continued to be made from stone.

II. Mesopotomia

A. Settled Agriculture in an Unstable Landscape

1. Mesopotamia is the alluvial plain area alongside and between the Tigris and Euphrates Rivers. The area is a difficult environment for agriculture because
there is little rainfall, the rivers flood at the wrong time for grain agriculture, and
the rivers change course unpredictably.

2. Mesopotamia does have a warm climate and good soil. By 4000 B.C.E.
farmers were using cattle-pulled plows and a sort of planter to cultivate barley.
Just after 3000 B.C.E. they began constructing irrigation canals to bring water
to fields farther away from the rivers.

3. The earliest people of Mesopotamia and the initial creators of Mesopotamian
culture were the Sumerians, who were present at least as early as 5000 B.C.E.
By 2000 B.C.E. the Sumerians were supplanted by Semitic-speaking peoples
who dominated and intermarried with the Sumerians but preserved many
elements of Sumerian culture.

B. Cities, Kings, and Trade

1. Early Mesopotamian society was a society of villages and cities linked together
in a system of mutual interdependence. Cities depended on villages to produce
surplus food to feed the nonproducing urban elite and craftsmen. In return, the
cities provided the villages with military protection, markets, and specialist-
produced goods.

2. Together, a city and its agricultural hinterland formed what we call a city-state.
The Mesopotamian city-states sometimes fought with each other over
resources like water and land; at other times, city-states cooperated with each
other in sharing resources. City-states also traded with one another.
3. City-states could mobilize human resources to open new agricultural land to build and maintain irrigation systems. Construction of irrigation systems required the organization of large numbers of people for labor.

4. Secular leadership developed in the third millennium B.C.E. when “big men” (lugal), who may have originally been leaders of armies, emerged as secular leaders. The lugal ruled from their palaces and tended to take over religious control of institutions. *The Epic of Gilgamesh* provides an example of the exercise of secular power.

5. Eventually some of the city-states became powerful enough to absorb others and thus create larger territorial states. Two examples of this development are the Akkadian state, founded by Sargon of Akkad around 2350 B.C.E. and the Third Dynasty of Ur (2112 - 2004 B.C.E.)

6. A third territorial state was established by Hammurabi and is known to historians as the “Old Babylonian” state. Hammurabi is also known for the Law Code associate with his name, which provides us with a source of information about Old Babylonian law, punishments, and society.

7. The states of Mesopotamia needed resources and obtained them not only by territorial expansion, but also through a flourishing long-distance trade. Merchants were originally employed by temples or palaces; later, in the second millennium B.C.E., private merchants merged. Trade was carried out through bater.

C. Mesopotamian Society
1. Mesopotamia had a stratified society in which kings and priest controlled much of the wealth. The three classes of Mesopotamian society were: (1) the free landowning class; (2) dependent farmers and artisans; and (3) slaves. Slavery was not a fundamental part of the economy, and most slaves were prisoners of war.

2. Some scholars believe that the developments of agriculture brought about a decline in the status of women as men did the value-producing work of plowing and irrigation. Women had no political role, but they could own property, control their dowry, and engage in trade. The rise of an urban merchant class in the second millennium B.C.E. appears to have been accompanied by greater emphasis on male privilege and an attendant decline in women’s status.

D. Gods, Priests, and Temples

1. The religion of Mesopotamia was an amalgam of Sumerian and later Semitic beliefs and deities. Mesopotamian deities were anthropomorphic.

2. Humans were regarded as servants of the gods. In temples, a complex, specialized hereditary priesthood served the gods as a servant serves a master. The temples themselves were walled compounds containing religious and functional buildings. The most visible part of the temple compound was the ziggurat.

3. We have little knowledge of the beliefs and religious practices of common people. Evidence indicates a popular belief in magic and in the use of magic to influence gods.

E. Technology and Science
1. Technology is defined as “any specialized knowledge that is used to transform the natural environment and human society.” Thus defined, the concept of technology includes not only things like irrigation systems, but also nonmaterial specialized knowledge such as religious lore and ceremony and writing systems.

2. The Mesopotamian writing system (cuneiform) evolved from the use of pictures to represent the sounds of words or parts of the words. The writing system was complex, required the use of hundreds of signs, and was a monopoly of the scribes.

3. Cuneiform was developed to write Sumerian, but was later used to write Akkadian and other Semitic and non-Semitic languages. Cuneiform was used to write economic, political, legal, literary, religious, and scientific texts.

III. Egypt

A. The Land of Egypt: “Gift of the Nile”

1. This land of Egypt is defined by the Nile River, the narrow green strip of arable land on either side of its banks, and the fertile Nile delta area. The rest of the country is barren desert, the unfriendly “Red Land” that contrasted with the “Black Land,” which was home to the vast majority of the Egyptian population.

2. Egypt was traditionally divided into two areas: Upper Egypt, along the southern part of the Nile as far south as the First Cataract, and Lower Egypt, the northern delta area. The climate was good for agriculture, but with little or no rainfall, farmers had to depend on the river for irrigation.
3. The Nile floods regularly and at the right time of year, leaving a rich and easily worked deposit of silt. Egyptian agriculture depended upon the floods, and crops could be adversely affected if the floods were too high or not high enough. Generally speaking, however, the floods were regular, and this inspired the Egyptians to view the universe as a regular and orderly place.

4. Egypt's other natural resources included reeds (such as papyrus for writing), wild animals, birds and fish, plentiful building stone and clay, and access to copper and turquoise from the desert and gold from Nubia.

B. Divine Kingship

1. Egypt's political organization evolved from a pattern of small states ruled by local kings to the emergence of a large, unified Egyptian state around 3100 B.C.E. Historians organize Egyptian history into a series of thirty dynasties falling into three longer periods: the Old, Middle, and New Kingdoms. These three periods were divided by periods of political fragmentation and chaos.

2. Kings known as pharaohs dominated the Egyptian state. The pharaohs were regarded as gods come to earth to ensure the welfare and prosperity of the people. The death of a pharaoh was thought to be the beginning of his journey back to the land of the gods. Funeral rites and proper preservation of the body were therefore tremendous of importance.

3. Early pharaohs were buried in flat-topped rectangular tombs. Stepped pyramid tombs appeared about 2630 B.C.E. and smooth-sided pyramids a bit later.

4. The great pyramid tombs at Giza were constructed between 2550 and 2490 B.C.E. The great pyramids were constructed with stone tools and simple lever,
pulley, and roller technology and required substantial inputs of resources and labor.

C. Administration and Communication

1. Egypt was governed by a central administration in the capital city through a system of provincial and village bureaucracies. Bureaucrats at the center kept track of land, labor, taxes, and people; collected resources from throughout the country; and used them to support the central government institutions (the palace, the bureaucracy, and the army) and to maintain temples and construct monuments.

2. The ancient Egyptians developed two writing systems: hieroglyphics and a cursive script. Egyptians wrote on papyrus and used writing for religious and secular literature as well as for record keeping.

3. Tensions between central and local government are a constant feature of Egyptian political history. At times when the central power was predominant, provincial officials were appointed and by the central governments on the basis of merit. When central power was weak, provincial officials tended to become autonomous, made their positions hereditary, and had themselves buried in their own districts rather than near the tombs of their kings.

4. Egypt was more rural than Mesopotamia. It did have cities, but since they have not been excavated, we know little about urban life in Egypt.

5. Egypt regarded all foreigners as enemies, but its desert nomad neighbors posed no serious military threat. Egypt was generally more interested in
acquiring resources than in acquiring territory; resources could often be acquired through trade.

6. Egypt traded directly with Levant and Nubia and indirectly with the land of Punt (probably part of modern Somalia). Items of trade included exports of papyrus, grain, and gold and imports of incense, Nubian gold, Lebanese cedar, and tropical African ivory, ebony, and animals.

D. The People of Egypt

1. Ancient Egypt had a population of about 1 to 1.5 millions physically heterogeneous people, some dark-skinned, and some lighter-skinned. The people were divided into several social strata: (1) the king and high-ranking officials; (2) lower-level officials, local leaders and priests, professionals, artisans, well-off farmers; and (3) peasants. The majority of the populations was peasants.

2. Peasants lived in villages, cultivated the soil, and were responsible for paying taxes and providing labor service.

3. Paintings indicate that women were subordinate to men and engaged in domestic activities. Egyptian women did have the right to hold, inherit, and will property and retained rights over their own dowry after divorce. They probably had more rights than Mesopotamian women.

E. Belief and Knowledge

1. Egyptian religious beliefs were based on a cyclical view of nature. Two of the most significant gods, the sun-god Re and Osiris, god of the Underworld, who
was killed, dismembered, and then restored to life, represent renewal and life after death.

2. The kings who were identified with Re and with Horus, the son of Osiris, served as chief priests. The supreme god of the Egyptian pantheon was generally the god of the city that was serving as the capital.

3. The Egyptians spent a large amount of their wealth in constructing fabulous temples. Temple activities included regular offerings to the gods and great festivals.

4. We know little about popular religious beliefs. What we do know indicates that the Egyptians generally believed in magic and in an afterlife. Concern with the afterlife inspired Egyptians to mummify the bodies of the dead before entombing them.

5. Tombs were usually built at the edge of the desert to avoid wasting arable land. Tombs contain pictures and samples of food and other necessities and thus are a valuable source of information about daily life in Egypt. The amount and quality of tomb goods and the form of the tombs themselves reflect the social status of the deceased.

6. The ancient Egyptians acquired much advanced knowledge and technology. Knowledge of anatomy was gained in the process of mummification. Other areas of scientific and technological advance included mathematics, astronomy, calendar making, irrigation, engineering and architecture, and transportation technology.

IV. The Indus Valley Civilization
A. Natural Environment

1. The central part of the Indus Valley area is the Sind region of modern Pakistan. Adjacent related areas included the Hakra River (now dried up), the Punjab, and the Indus delta region.

2. The Indus carries a lot of silt and floods regularly twice a year. Access to river water for irrigation allowed farmers in the Indus Valley and related areas to produce two crops a year despite the region’s sparse rainfall.

B. Material Culture

1. The Indus Valley civilization flourished from 2600 to 1900 B.C.E. Knowledge of the civilization is gained from archaeological excavation of the remains of Indus Valley settlements. The two largest and best-known sites are those at Harappa and Mohenjo-daro.

2. We know little of the identity, origins, or fate of the people of the Indus Valley, nor do we know what historical circumstances led to the development of a sophisticated urban civilization. Part of the problem is that, although they had a writing system, modern scholars are unable to decipher it.

3. The two major urban centers of the Indus Valley were Harrapa (3 1/2 miles in circumference, population about 35,000) and Mohenjo-daro (several times larger). Both settlements are surrounded by brick walls, have streets laid out in a grid pattern, and are supplied with covered drainage systems to carry away waste. There are remains of something like a citadel that may have been a center of authority, structures that may have been storehouses for grain, and barracks that may have been for artisans.
4. Both urban centers may have controlled the surrounding farmland. Harappa was located on the frontier between agricultural land and pastoral economies and may have been a nexus of trade in copper, tin, and precious stones from the northwest.

5. The Indus Valley civilization is characterized by a high degree of standardization in city planning, architecture, and even the size of the bricks. Some scholars have sought to explain this uniformity by hypothesizing the existence of an authoritarian central government, while others agree that it may have been a result of extensive trade within the region.

6. The people of the Indus Valley had better access to metal than did the Egyptians and the Mesopotamians. Thus the Indus Valley artisans used metal to create utilitarian goods as well as luxury items.

7. Technological achievements of the Indus Valley civilization included extensive irrigations systems, the potters’ wheel, kiln-baked bricks, a sophisticated bronze metallurgy, and a system of writing. The people of the Indus Valley carried out an extensive trade with the northwestern mountain areas, Iran and Afghanistan, and even Mesopotamia.

C. Transformation of the Indus Valley Civilization

1. Scholars formerly believed that the Indus Valley cities were abandoned around 1900 B.C.E. because of an invasion. Further evidence has convinced researchers that the decline of the Indus Valley civilizations was due to a breakdown caused by natural disasters and ecological change.
2. Ecological changes that probably led to a decline in agricultural production and the eventual collapse of the Indus Valley civilizations include the drying up of the Hakra River, salinization, and erosion. When urban centers collapsed, so did the way of life of the elite, but the peasants probably adapted and survived.