The introduction of the camel to West Africa in the fourth century made it possible to increase the trade between North Africa and the people south of the Sahara desert. The empires of Ghana, Mali, and Songhai in West Africa were built fundamentally upon farming and animal herding, but also upon their ability to take advantage of their location between gold mines in the south and salt mines in the central Sahara. The climate of West Africa is a frequently overlooked factor in how the empires developed. Scholars have recently drawn the connection between an increase in rainfall, which pushed the northern edge of the savannas, or grasslands, further north, and the emergence of Ghana, Mali, and Songhai.

The emphasis in teaching the history of West Africa is often placed on the rich natural resources available. The role of the Niger river as a conduit for transportation and trade is emphasized, as is the role of the three vegetation zones in shaping the development of kingdoms in sub-Saharan Africa. In recent decades much research has been done related to the field of environmental history.

Ghana

The empire of Ghana was founded by a Mande-speaking people known as the Soninke. The name of their kingdom comes from the title of their ruler: Ghana. They became a powerful political entity in West Africa in approximately 500 CE. The empire of Ghana, not to be confused with the present-day country in Africa by the same name, was located in the Sahel, or "edge" of the Sahara desert on its southern side. This region now includes parts of the countries of Mali and Mauritania. (It encompassed none of the area now known as Ghana).

It was after the introduction of camels to the region in about 300 CE that trade across the Sahara desert became more feasible and profitable. The people living between the Sahara desert and the forests in tropical West Africa were in a prime position to take advantage of the increasing trade along the trans-Saharan routes. Located in between two regions that had different products to trade, the ruler of Ghana was able to collect taxes on the trade between people to the north and to the south. The people of the rain forest to the south were willing and able to trade the gold from their mines for the salt they needed. Gold and salt were not the only items exchanged. Leather and metal goods, slaves, honey, tools, livestock, horses, textiles, and jewelry also were traded. Most of the traders who crossed the desert were Muslims. While most people in Ghana retained their traditional religion, some of the elite converted to Islam. Beginning in the ninth century, Muslim scholars created written records about Ghana, although most of these were written by North African geographers such as al-Bakri, who spoke with travelers who visited Ghana but did not visit the empire himself.

Our understanding of Africa has benefitted greatly from the work of <u>archaeologists</u>, anthropologists, linguists, and other scholars. Recent scholarship has shown that the empire of Ghana probably continued a tradition that had been established by people living in the same area earlier. Archaeologists have excavated the site of Koumbi Saleh, referred to in early Arabic sources as the capital of Ghana. Recent scholarship indicates that this may not have been Ghana's capital; in fact the empire may have had several important cities. Ghana ceased to be a major political power in 1076 after it was invaded by the Almoravids, Muslim invaders from Mauritania. Ghana achieved independence from the Almoravids but no strong ruler emerged to

take control. As a result, the area became less stable and trade caravans tried to avoid Koumbi Saleh, making Ghana weaker. One leader to emerge was Sumanguru. Oral traditions portray him as a nasty ruler, levying high taxes, killing opponents, and enslaving women. He declared himself ruler of Ghana and no one was able to overthrow him until Sundiata, leader of the Malinke (Mandinka), another Mande-speaking people, came to power.

Mali

The origin and history of Mali was preserved both in written and oral accounts. Oral history was passed from generation to generation by *griots* (keepers of oral history) and recorded by Muslim scholars who either visited the region (notably ibn Battuta) or who spoke with people who traveled to the area. As its wealth grew, it became an area of keen interest to Muslim scholars who traveled there and wrote about their experiences.

When Sumanguru was king of Ghana, the empire was not nearly as large or strong as it had been at its peak. Yet, he was able to conquer the Malinke people. According to oral tradition, the rule of Sumanguru was extremely harsh. This is the origin of the story of the Lion King. This legend tells of Sundiata's victory over Sumanguru at the battle on the plain of Krina. Under Sundiata and his successors, Mali was able to expand well beyond the territory of Ghana. At its peak, it may have been the largest land empire of its time except for the Mongol empire. The rulers of Mali controlled an area larger than western Europe. Its borders stretched to the Atlantic coast. Similarly to Ghana, Mali took advantage of its location to control the gold and salt trade. A tax upon this trade was an important source of revenue that helped generate Mali's wealth. The rulers used this wealth to create an army, which included cavalry forces, to conquer other territories.

Compared to Ghana, Islam was adopted by more people in Mali. This was helped perhaps by Mansa Musa, or King Musa, Mali's most famous ruler. The world became aware of Mali's wealth after Mansa Musa made a pilgrimage to Mecca accompanied by 60,000 people and hundreds of camels loaded with gold. A Muslim scholar remarked that the amount of gold spent by Mansa Musa in Cairo depressed the value of gold for a decade after his visit. The spectacle of his pilgrimage drew the world's attention to Mali. Mansa Musa and the gold of Mali appeared on a map produced in 1375 by Abraham Cresques. The attention brought by Mansa Musa's pilgrimage increased the volume of trade between Mali and the rest of the world.

When Mansa Musa returned from his pilgrimage, he stopped in the city of Gao, which had been captured by his army. Gao, an important trade center on the Niger river, also controlled areas rich in copper. Upon departing from Gao, Mansa Musa took two Songhai princes as hostages to ensure the captured city's loyalty. This also expanded the Mali empire further north.

In addition to picking up the two royal captives in Gao, Mansa Musa returned from his pilgrimage with Arab scholars and the architect Abu-Ishaq Ibrahim al-Saheli, who subsequently changed the look and style of West African architecture. Under the rule of Mansa Musa and his successors, the city of Timbuktu became a center for Muslim learning and scholarship. Some of

the mosques and other buildings constructed under al-Saheli's designs can still be seen today in Jenne and Timbuktu.

After the death of Mansa Musa, his descendents fought over who should succeed him as ruler. The internal fighting, combined with attacks from Tuareg nomads and rebellions of outlying territories, contributed to Mali's decline. One of the cities that rebelled was Gao, after the captured princes escaped and returned home. Another city that fell was Timbuktu, which was sacked and burned by Tuareg from the north. As a result, Mali lost of control over the economically-important salt, gold, and copper revenue.

Songhai

The people of Songhai were not happy under Mali's rule. When Mansa Musa died, the captives escaped and returned to Gao. One of these princes was selected to be the ruler and began the Sonni dynasty. Sonni is a Songhai word that means restoration and was used to describe the return of Songhai rule.

There are two versions of Songhai's rule and expansion. One comes from Muslim scholars who chronicled the events and the other from oral tradition. The Muslim accounts are very critical of Sonni Ali, because of the way he practiced a combination of Islam and traditional religion and left the people of Songhai to their traditional religions.

Sonni Ali declared Gao independent and under his leadership, and Songhai expanded to encompass much of the area formerly controlled by Mali and beyond. He led a large army, which included a cavalry and a "navy" that patrolled the rivers of West Africa. Using his military might, he captured the cities of Timbuktu and Jenne. While he was hated by Muslims for his razing of Timbuktu, he ordered his troops to leave Jenne intact. Sonni Ali did more than conquer. He also used diplomacy to help keep the Songhai empire strong. When the Malinke were threatening to form an alliance with the Portuguese, he offered the latter trade concessions on the Atlantic coast.

When Sonni Ali died, he was succeeded by his son, who also practiced a modified version of Islam. The Muslim scholars consequently selected a devout military leader to lead a coup against the ruler. The general, Muhammad Ture, became ruler of Songhai as Askiya Muhammad. His rule was endorsed by the sharif of Mecca when he declared Muhammad the "Caliph of the Sudan." Similar to the Catholic Church's attempt to wield political power by its support of leaders, Muslim leaders attempted to spread their influence in West Africa by supporting rulers that followed Islamic law.

During the Askiya dynasty, Songhai's reputation for Islamic scholarship grew. Over a hundred Muslim schools were established in Timbuktu, and scholars from all over the Muslim empire came there to study. The empire received part of its wealth from controlling regional trans-Saharan trade networks as Ghana and Mali had done. But in addition, Songhai forces captured slaves both for production and export. Scholars estimate that the slave "plantations" that were established along the Niger river probably helped create its most productive period of farming. In

addition to using slaves for farming, Songhai rulers sold slaves for export. Historian Paul Lovejoy estimates that the slave exports from Songhai were at their peak in the sixteenth century.

Although a central government with five provincial governors was established during the rule of Sonni Ali and Askiya Muhammad, Songhai did not last long. In the late sixteenth century, the empire was weakened by a civil war. A ruler of the Sa'adian dynasty in Morocco took advantage of this situation to cross the desert and invade Songhai using an army equipped with firearms. It is during this time that trade interactions between Africa and Europe increased and more gold was shipped to southern ports to be transferred to Europe, perhaps decreasing the value of Morocco's capture of Songhai.

Disease

The ecological environment of West Africa presents serious challenges to the people that inhabit the area. The rich environmental zones which, at a glance, appear so conducive to agriculture are also home to tropical diseases. Malaria was probably one of the major causes of death in infants and children. Owing to their long exposure to the disease, however, West Africans likely did not suffer the high mortality rates from malaria that people in other parts of the world did. Malaria is spread to humans by mosquitoes, so in all except the coldest and driest areas malaria was a problem.

Another disease that plagued West Africa was spread by the tsetse fly. Trypanosomosis causes sleeping sickness in humans; it is also fatal for large domestic animals, so West Africans south of the desert were not able to raise cattle that could be used for either food or production. The result was a diet lacking in protein, which compounded the problems caused by endemic diseases.

The fact that Mali and Songhai were able to create a large cavalry is a testament to their innovation and wealth. Most of the horses used in West African militaries were imported from North Africa. A number of attempts were made to breed a horse that was less susceptible to trypanosomosis, but on the whole this was not successful. Records from the eighteenth century show an average lifespan of less than one year for horses in West Africa. It is probable, based on the records available, that the mortality for horses in the Mali and Songhai cavalry was not much better. The ability to import horses across the desert and maintain a cavalry in the face of such daunting odds speaks to the wealth of Mali and Songhai.

Changing Climate

Interest in climatic history arose out of the concern generated by the periodic droughts and famines that devastated Africa during the last thirty-five years of the twentieth century. The early work of scholars looking into Africa's climate history tried to show a direct causal relationship between African human and environmental catastrophes. That is, these scholars argued for a connection between cutting down trees and droughts. In this argument, Africans became responsible for their own problems and the rest of the world could ignore them. This contrasted with the *longue-durée* (long-term) view taken by environmental historians studying Europe and North America. This view argues that climate can have indirect effects which then influence humans to adapt to new environmental conditions. In the last three decades, environmental

historians studying Africa have shifted their focus to examine human adaption to inter-seasonal climate changes.

One argument forwarded by Reid Bryson and Christine Paddock is that regions are influenced by a variety of climatic factors, but often there is one that is the "limiting factor." In Iceland, for example, a small decrease in temperature can shorten the growing season by a significant percent. In West Africa the "limiting factor" in regard to food production is rainfall. Rainfall affects the crops that can be grown, but it also has an effect on whether domestic animals like cattle and horses can be raised in an area. The West African vegetation zones can be mapped, not as fixed regions, but according to changing rainfall boundaries. For example, 100 mm isohyte is the border of the Sahara, the 1000 mm rainfall zone is the limit of the area in which the tsetse flies can live. Areas south of this are often fatal for large domestic animals due to the trypanosomosis carried by the tsetse fly. Some scholars have argued that this also protected Africans who lived in the forest from attacks by empires with cavalries.

One scholar, James Webb, points out that the three centuries in which Ghana, Mali, and Songhai arose in West Africa experienced a climate change that caused the southern border of the Sahara to move northwards. The northern border of the Sahel was 250 miles further north in 1600 than it was in 1850. This allowed the empires to establish farms in areas that later could only support camel grazing.

There is still much work to be done in the area of African climate history, but it is clear that we need to look at the achievements of the West African empires in the proper context. The success of Africans in establishing their empires in the midst of a harsh and challenging environment speaks to their creativity, adaptability, and the skill of their leaders.

Lesson 1

Student Handout 1.2—Geography and its Influence on African History

The geography, or physical characteristics of the land, may affect the characteristics and development of <u>civilizations</u>. For example, a civilization that has navigable rivers may use those to integrate the region economically and to link interior areas with seacoasts and therefore encourage trade with foreign lands. A region that has very limited land that is good for growing crops is less likely to develop a <u>sedentary</u> civilization than an area with abundant fertile soil and a climate good for crops. Some geographical areas have more advantages than others. In addition to geographical land forms, the climate may influence the types of agriculture, trade, and industry that are possible.

In West Africa, there are three general vegetation zones: desert, savanna (grasslands), and forests. Each one has its own ecological character, that is, a range of possible relationships between humans and the land. The Sahara desert covers most of the northern section of West Africa. The savannas south of the Sahara are open grasslands to the north and wooded grasslands farther to the south. South of the savanna are wet tropical forests. In the past, historians thought the Sahara, along with the oceans that surround the African continent, kept its empires isolated from other civilizations. They also thought the abundant natural resources in Africa were unchanging. The actual situation is more complicated.

Over the past several hundred thousand years, the southern Sahara has varied in size and amount of precipitation. Changes in rainfall influenced the pattern of human migration and agriculture. While precious minerals like gold are found in the savanna and forest areas of West Africa, people had limited access to salt, a requirement for human survival. It had to be traded in from salt beds along the southern or western seacoasts or from mines in the Sahara. Such variations in natural resources of course encouraged regional trade. The West African kingdoms of Ghana, Mali, and Songhai were able to grow and prosper due to their location and control of transregional trade routes. The introduction of camels for trans-Saharan transport early in the first millennium CE greatly expanded the potential of trade between West Africa and Mediterranean North Africa.

Although West Africa had numerous natural resources, the advantages of these riches could be offset somewhat by disadvantages, such as erratic rainfall patterns that limited the growing season for rice and millet, or the presence of diseases like malaria. These drawbacks made it harder for communities to increase their population. Another challenge was provided by the ocean currents on the Atlantic coast of West Africa. While eastern African communities could take advantage of the monsoon winds to engage in trade across the Indian ocean, the Atlantic winds and currents flowed consistently southward, making African maritime exploration to the north more difficult.