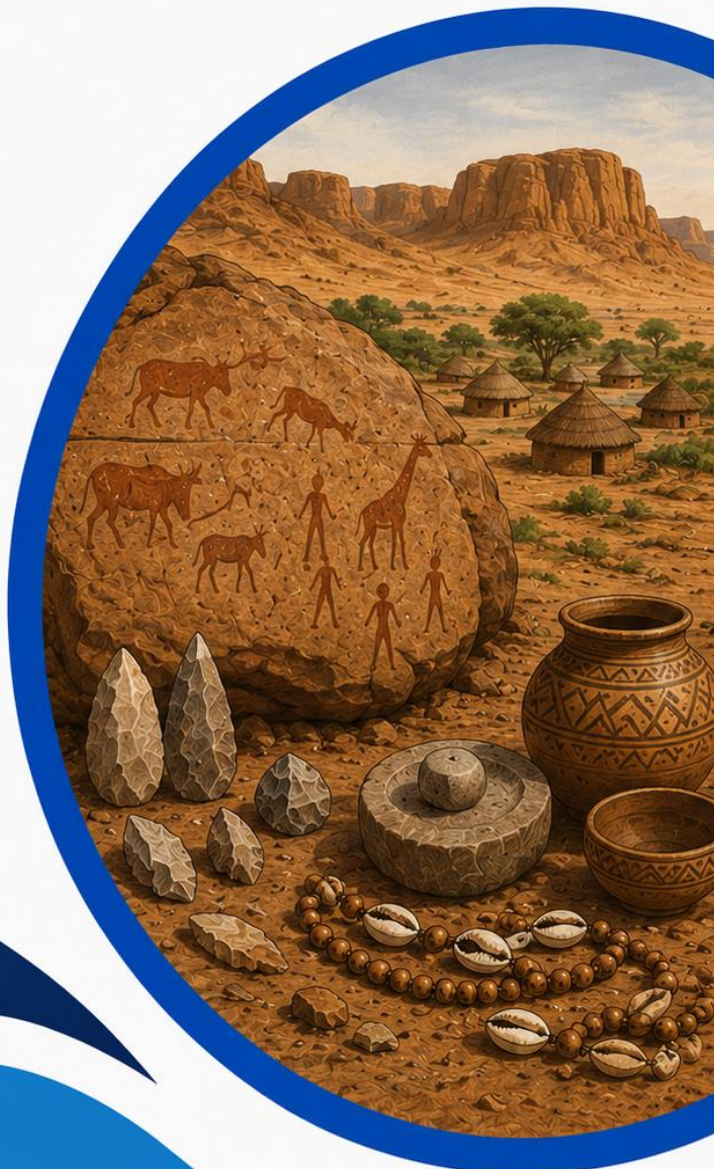




La-Net

ARC 302

PREHISTORY OF WEST AFRICA AND THE SAHARA



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ARC 302: Prehistory of West Africa and the Sahara (3 Units C: LH 45)

Course Code: ARC 302

Course Title: Prehistory of West Africa and the Sahara

Course Unit: 3 Units C

Series 1: West African Palaeoenvironments and Archaeological Development

Series 2: Anglophone and Francophone Traditions in West African Archaeology

Series 3: Stone Age Sequences in West Africa and the Sahara

Series 4: Food Production and Metallurgy in West Africa and the Sahara

Series 5: Complex Societies, Trade, and Heritage in West Africa

Series 1 West African Palaeoenvironments and Archaeological Development

Series Outline

- **Part 1.1 West African palaeoenvironments**
 - 1.1.1 Climatic changes and environmental shifts
 - 1.1.2 Impact on human adaptation and settlement
- **Part 1.2 Early explorations and colonial influences**
 - 1.2.1 Role of explorers and antiquarians
 - 1.2.2 Colonial perspectives on archaeology
- **Part 1.3 Growth of archaeological institutions and research traditions**
 - 1.3.1 Establishment of universities and research centres
 - 1.3.2 Contributions of African scholars
- **Part 1.4 Key themes, challenges, and prospects**



- 1.4.1 Methodological approaches and innovations
- 1.4.2 Contemporary challenges and future directions

Introduction

The prehistory of West Africa is deeply shaped by its environmental background and the development of archaeology as a discipline. Climatic changes influenced human adaptation and settlement, while the growth of archaeology provided the frameworks to interpret these transformations. Understanding these foundations is essential for appreciating how scholars reconstruct the past.

The aim of this Series is to explain the palaeoenvironmental conditions of West Africa and to trace the development of archaeology in the region, highlighting early explorations, institutional growth, and contemporary challenges.

We shall commence this Series by examining West African palaeoenvironments, focusing on climatic changes and their impact on human adaptation. Next, we will move on to early explorations and colonial influences, considering how they shaped archaeological perspectives. Afterwards, we will continue with the growth of archaeological institutions and research traditions, highlighting the contributions of African scholars. Finally, we will conclude with key themes, challenges, and prospects, exploring methodological approaches, innovations, and future directions.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- **SLO 1.1** define West African palaeoenvironments and explain major climatic changes,
- **SLO 1.2** analyse how environmental shifts influenced human adaptation and settlement,
- **SLO 1.3** describe the role of early explorers and colonial influences in West African archaeology,



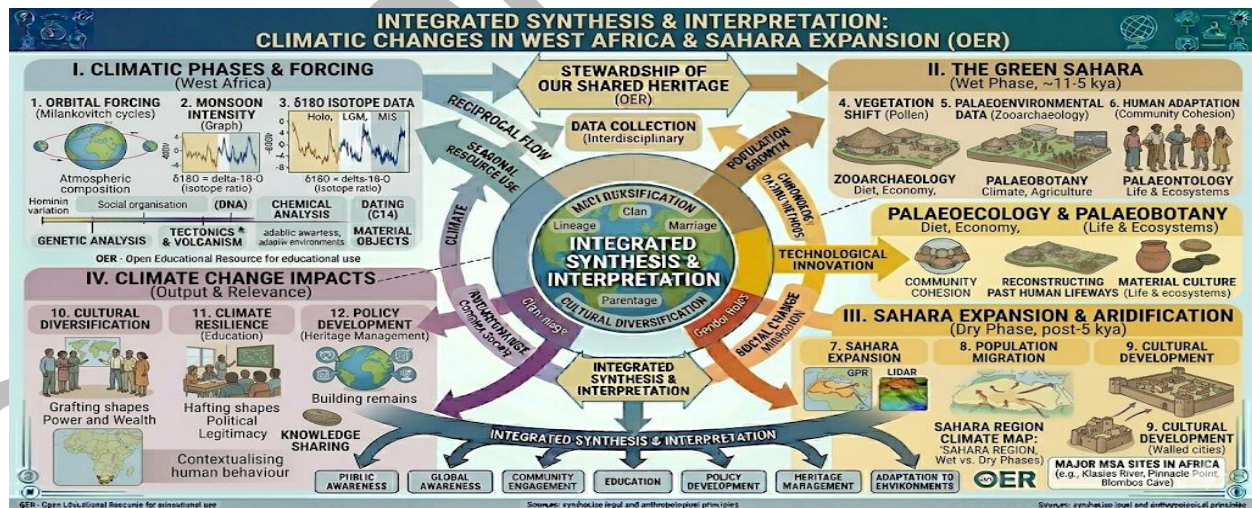
- **SLO 1.4** evaluate the growth of archaeological institutions and the contributions of African scholars,
- **SLO 1.5** explain key methodological approaches in West African archaeology, and
- **SLO 1.6** assess contemporary challenges and prospects for archaeological development in the region.

1.1 West African Palaeoenvironments

1.1.1 Climatic changes and environmental shifts

Palaeoenvironment refers to the ancient environmental conditions that shaped human existence in the past. In West Africa, climatic changes such as fluctuations between wet and dry periods influenced vegetation, water availability, and the spread of deserts and savannahs. These shifts determined where people could live, farm, or hunt.

Archaeologists use evidence from sediments, pollen analysis, and geomorphology to reconstruct these environments. Such studies reveal that the Sahara was once greener, supporting rivers and lakes, before becoming the desert we know today.



Short description: Diagram showing climatic changes in West Africa (wet and dry phases, Sahara expansion).

Caption: **Figure 1.1 Climatic changes in West Africa**



Fill in the blank: Archaeologists use evidence from sediments and _____ analysis to reconstruct ancient environments.

1.1.2 Impact on human adaptation and settlement

Environmental shifts had a direct impact on human adaptation. Communities moved closer to rivers and lakes during dry phases, while wetter periods allowed for farming and larger settlements. The spread of savannahs encouraged hunting and herding, while desertification forced migration and innovation in survival strategies.

These adaptations show the resilience of human societies in West Africa. By studying settlement remains, archaeologists can trace how people responded to changing conditions, revealing the close relationship between environment and culture.

Box 1.2 Human adaptation to palaeoenvironmental changes

Adaptation Strategy	Environmental Driver	Societal Response
Migration	Desertification and "desiccation" (drying) of the Sahara.	North-to-South Movement: Populations moved from the drying Sahara into the more fertile Middle Niger and Lake Chad basins.
Farming	Unreliable wild grain harvests during dry spells.	Domestication: The transition from foraging to the cultivation of drought-resistant crops like Pearl Millet and African Rice .



Adaptation Strategy	Environmental Driver	Societal Response
Herding	Shifting grasslands and the movement of Tsetse fly belts.	Pastoralism: Moving livestock (cattle, sheep, goats) to track seasonal rains, developing "Transhumance" routes.
Settlement Shifts	Changing water levels in river valleys and inland deltas.	Aggregation & Urbanization: Small, scattered camps merged into larger, permanent settlements (e.g., Dhar Tichitt, Jenné-jeno) near reliable water sources.

Fill in the blank: The spread of savannahs encouraged hunting and _____ as survival strategies.

Pilot questions 1.1

1. What does palaeoenvironment mean?
2. Mention one method archaeologists use to reconstruct ancient environments.
3. How did climatic changes affect settlement in West Africa?
4. Give one example of human adaptation to environmental shifts.
5. Why is studying palaeoenvironments important in archaeology?

1.2 Early Explorations and Colonial Influences

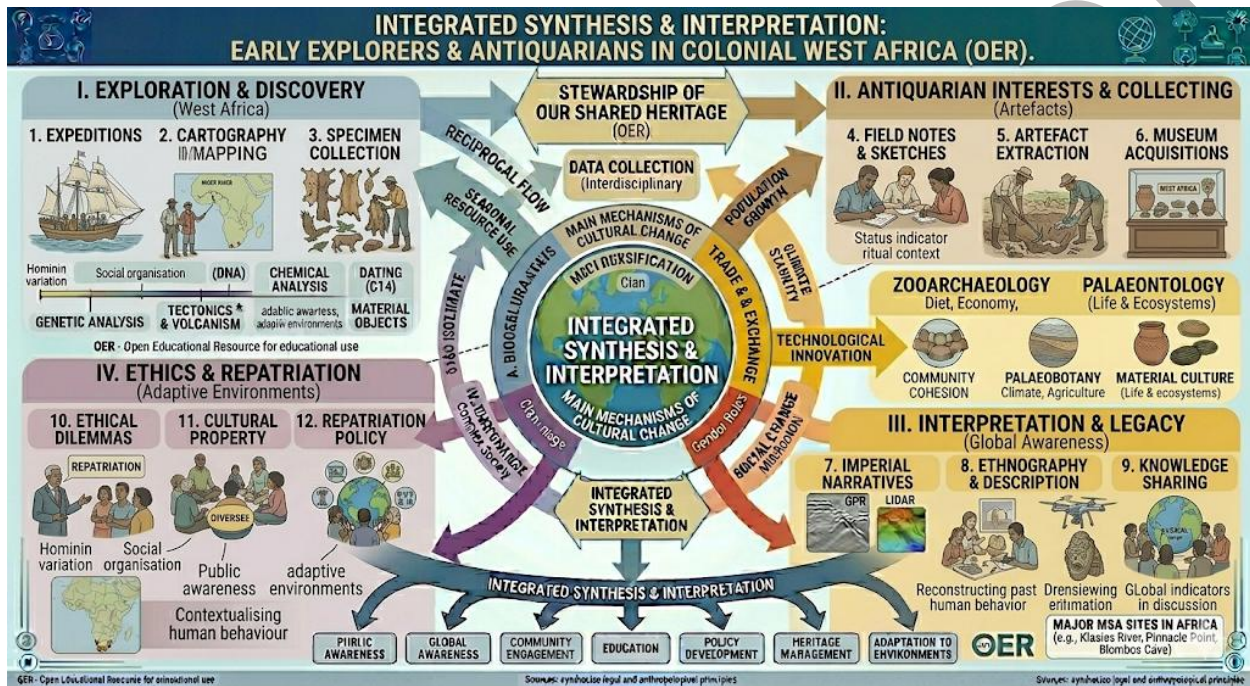
1.2.1 Role of explorers and antiquarians

Early interest in West African archaeology was often driven by **explorers** and **antiquarians**, individuals who collected artefacts and recorded observations during their travels. These figures



were not professional archaeologists in the modern sense, but their notes and collections provided some of the earliest records of West African material culture.

Their work was shaped by curiosity, trade, and colonial expansion. While they sometimes preserved valuable information, they often removed artefacts without proper documentation, leading to gaps in the archaeological record.



Short description: Illustration showing explorers collecting artefacts in West Africa.

Caption: **Figure 1.3 Early explorers and antiquarians in West Africa**

Fill in the blank: Early explorers and antiquarians often removed artefacts without proper _____, creating gaps in the record.

1.2.2 Colonial perspectives on archaeology

During the colonial period, archaeology in West Africa was influenced by political and economic agendas. Colonial administrators often viewed artefacts as trophies of empire, emphasising their value for European museums rather than for local communities.



This perspective shaped excavation methods and interpretations, with colonial scholars frequently imposing European frameworks on African history. As a result, indigenous voices and cultural contexts were marginalised. Today, archaeologists critically examine these colonial legacies to ensure more inclusive and ethical practices.

Box 1.4 Colonial perspectives on archaeology in West Africa

Perspective/Practice	Description	Impact on Heritage
Artefact Removal	The systematic extraction of cultural objects for European museums and private collections.	Heritage Loss: Decontextualization of objects like the Benin Bronzes, stripping them of their spiritual and social functions.
European Frameworks	The application of European historical timelines and categories to African sites.	Distorted Narratives: Failure to recognize unique African developmental paths, often forcing them into "Stone Age" or "Iron Age" labels defined by Europe.
Marginalisation	The exclusion of indigenous knowledge, oral traditions, and local scholars from the research process.	Silenced Voices: Creation of a "top-down" history where local communities were viewed as laborers rather than intellectual partners.



Perspective/Practice	Description	Impact on Heritage
Diffusionism	The belief that complex African technologies (like bronze casting) must have been brought by "outsiders."	Denied Innovation: Attributing African achievements to Phoenicians, Greeks, or "lost tribes" rather than local genius.

Fill in the blank: Colonial administrators often emphasised the value of artefacts for European _____ rather than local communities.

Pilot questions 1.2

1. Who were the early explorers and antiquarians in West African archaeology?
2. What was one limitation of their work?
3. How did colonial administrators view artefacts?
4. Mention one way colonial perspectives shaped archaeological interpretation.
5. Why is it important to examine colonial legacies in archaeology today?

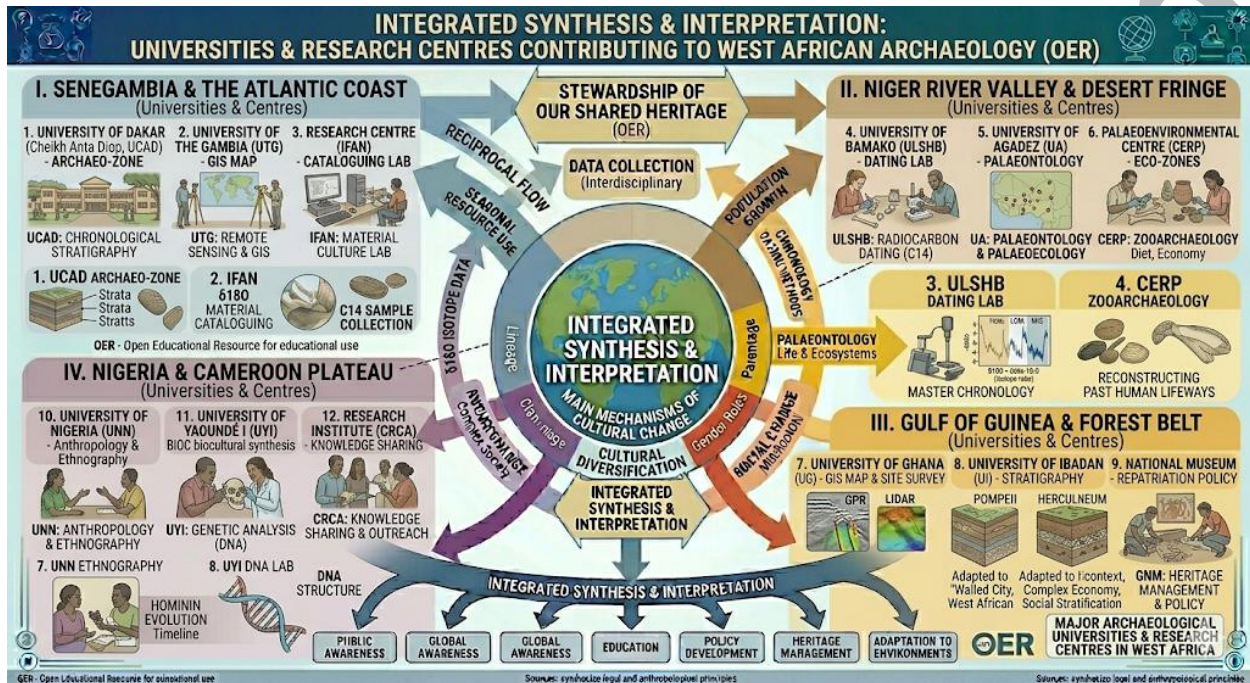
1.3 Growth of Archaeological Institutions and Research Traditions

1.3.1 Establishment of universities and research centres

The growth of archaeology in West Africa was marked by the establishment of **universities** and **research centres**, which provided formal training and created platforms for systematic study. These institutions helped move archaeology away from colonial antiquarianism towards a professional discipline.



Universities in Nigeria, Ghana, and Senegal, among others, began to offer archaeology programmes, producing graduates who could carry out fieldwork and research. Research centres also facilitated excavations, surveys, and publications that contributed to the growing body of knowledge about West African prehistory.



Short description: Diagram showing universities and research centres contributing to archaeology in West Africa.

Caption: **Figure 1.5 Establishment of universities and research centres in West African archaeology**

Fill in the blank: The establishment of universities and research centres helped move archaeology away from colonial _____.

1.3.2 Contributions of African scholars

The emergence of **African scholars** in archaeology transformed the discipline by introducing local perspectives and cultural sensitivity. These scholars challenged colonial interpretations and emphasised the importance of indigenous knowledge in reconstructing the past.



Their contributions included excavations of key sites, development of theoretical approaches suited to African contexts, and advocacy for heritage preservation. African archaeologists also played a vital role in training future generations, ensuring that archaeology in West Africa reflects both global standards and local realities.

Box 1.6 Contributions of African scholars to archaeology

Area of Contribution	Key Actions & Innovations	Impact on the Field
Excavations	Systematic digging of iconic sites like Igbo-Ukwu, Ife, and Jenné-jeno.	Empirical Evidence: Proving the deep antiquity and complexity of African urbanism and metallurgy through locally-led field research.
Theory	Developing "Ethnoarchaeology" and "Africanist" perspectives.	Decolonization: Challenging Western "diffusionist" myths by linking archaeological data with living oral traditions and indigenous logic.
Heritage Preservation	Spearheading national legislation and the creation of site museums.	Stewardship: Shifting the focus from "collecting for Europe" to "preserving for African communities."
Training	Establishing archaeology departments in universities across the continent.	Human Capital: Ensuring the future of the discipline is managed by highly skilled, indigenous professionals.



Fill in the blank: African scholars emphasised the importance of indigenous _____ in reconstructing the past.

Pilot questions 1.3

1. What marked the growth of archaeology in West Africa?
2. Mention one role of universities in archaeology.
3. How did African scholars transform the discipline?
4. Give one contribution of African archaeologists.
5. Why is local perspective important in archaeology?

1.4 Key Themes, Challenges, and Prospects

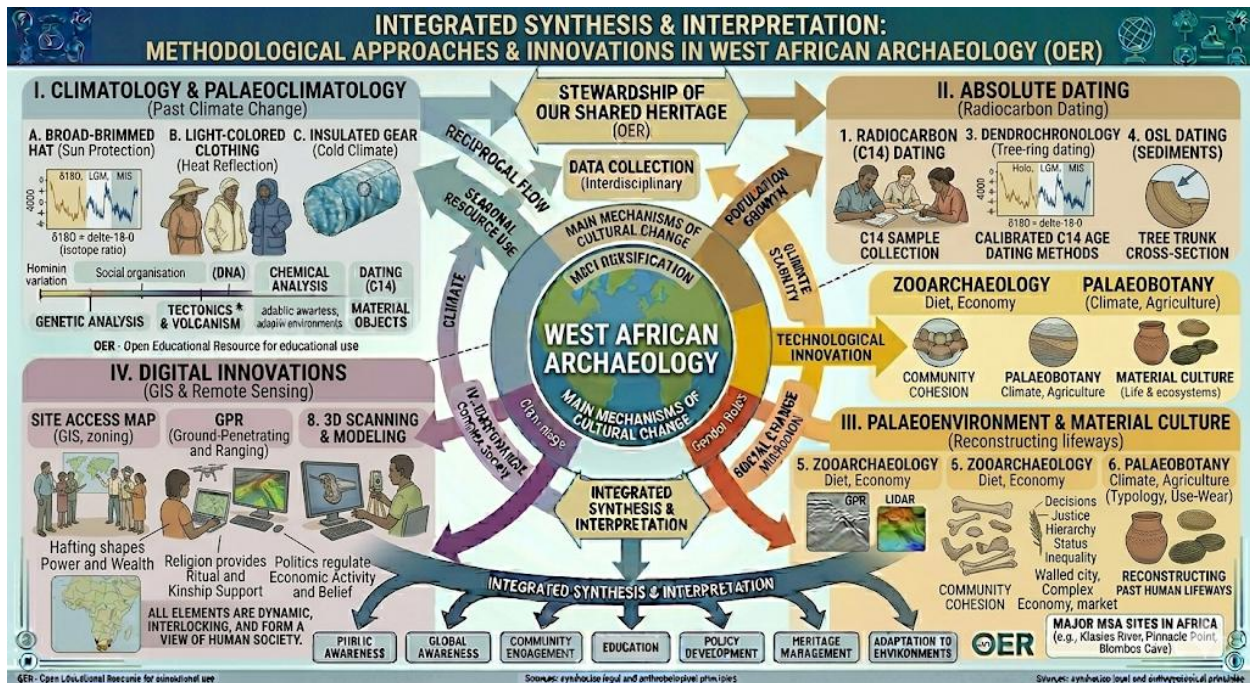
1.4.1 Methodological approaches and innovations

Archaeology in West Africa has advanced through the adoption of new **methodological approaches**, which are systematic ways of investigating and interpreting the past. These include scientific techniques such as radiocarbon dating, palaeoenvironmental reconstruction, and Geographic Information Systems (GIS). Such innovations allow archaeologists to build more accurate chronologies and understand settlement dynamics.

Another important innovation is community archaeology, which involves local people in research and heritage management. This approach ensures that archaeology is not only about academic study but also about empowering communities to value and protect their heritage.

Short description: Diagram showing methodological approaches in West African archaeology (radiocarbon dating, GIS, community archaeology). Caption: **Figure 1.7 Methodological approaches and innovations in West African archaeology**





Fill in the blank: Radiocarbon dating is a scientific technique used to build accurate _____ in archaeology.

1.4.2 Contemporary challenges and future directions

Despite these advances, archaeology in West Africa faces several **challenges**. Limited funding, inadequate infrastructure, and threats from looting and development projects hinder research and preservation. Political instability in some regions also makes fieldwork difficult.

Future directions include strengthening collaboration between African and international scholars, expanding training opportunities, and using digital technologies to document and share archaeological data. There is also a growing emphasis on decolonising archaeology, ensuring that interpretations reflect African perspectives and serve local communities.



Box 1.8 Contemporary challenges and future directions in West African archaeology

Key Challenge	Current Impact	Future Direction
Funding	Minimal government budgets for heritage; heavy reliance on short-term foreign grants.	Sustainable Financing: Developing public-private partnerships and "Heritage Tax" models linked to infrastructure projects.
Looting	Illegal excavation of sites (e.g., Nok, Bura) to feed the international "Black Market."	Community Custodianship: Empowering local "guards" and using international law for the aggressive repatriation of stolen goods.
Collaboration	Historically "extractive" partnerships where foreign teams lead and local teams provide labor.	Co-Creation: Establishing "Equal Partnership" models where research design, leadership, and publication are shared equally.
Decolonisation	Persistence of Eurocentric theories and language in heritage management.	Indigenous Epistemology: Integrating oral traditions and local languages into the core of archaeological theory and OER materials.

Fill in the blank: One major challenge facing archaeology in West Africa is the threat of _____ and development projects.

Pilot questions 1.4



1. Mention one methodological approach used in West African archaeology.
2. What is community archaeology?
3. Give one challenge facing archaeology in West Africa.
4. Mention one future direction for archaeology in the region.
5. Why is decolonising archaeology important?

Series Summary

This Series explored West African palaeoenvironments and the development of archaeology in the region. Its purpose was to highlight how environmental changes shaped human adaptation and settlement, and how archaeology as a discipline evolved from early explorations to modern institutions. These foundations are crucial for understanding the prehistory of West Africa and for appreciating the role of archaeology in reconstructing cultural heritage.

We began with palaeoenvironments, examining climatic changes and their impact on human settlement. Then we moved on to early explorations and colonial influences, considering how antiquarians and colonial administrators shaped interpretations. Afterwards, we studied the growth of archaeological institutions and the contributions of African scholars. Finally, we concluded with key themes, challenges, and prospects, focusing on methodological innovations and future directions. By completing this Series, you should now be able to define palaeoenvironments, analyse their impact on human adaptation, describe colonial influences, evaluate institutional growth, explain methodological approaches, and assess contemporary challenges, as outlined in the Series Learning Outcomes.

Glossary Of Terms

- **Antiquarians:** Early collectors of artefacts who recorded observations but lacked professional archaeological methods.
- **Archaeological institutions:** Universities and research centres that provide training and platforms for systematic study of archaeology.



- **Community archaeology:** An approach that involves local people in research and heritage management.
- **Palaeoenvironment:** Ancient environmental conditions that shaped human existence in the past.
- **Radiocarbon dating:** A scientific method used to determine the age of organic materials.
- **Research traditions:** Established practices and approaches that guide archaeological study in a region.



Concept Check Questions 1

Objective questions

1. Archaeologists use evidence from sediments and _____ analysis to reconstruct ancient environments. (Linked to SLO 1.1)
2. Early explorers and antiquarians often removed artefacts without proper _____. (Linked to SLO 1.3)
3. The establishment of universities helped move archaeology away from colonial _____. (Linked to SLO 1.4)
4. Radiocarbon dating is used to build accurate _____ in archaeology. (Linked to SLO 1.5)
5. One major challenge facing archaeology in West Africa is the threat of _____ and development projects. (Linked to SLO 1.6)

Short-answer questions

6. Define palaeoenvironment. (Linked to SLO 1.1)
7. Mention one impact of climatic changes on human settlement. (Linked to SLO 1.2)
8. What was one limitation of early explorers and antiquarians? (Linked to SLO 1.3)
9. Give one contribution of African scholars to archaeology. (Linked to SLO 1.4)
10. Mention one future direction for archaeology in West Africa. (Linked to SLO 1.6)

Long-answer questions

11. Explain how climatic changes influenced human adaptation and settlement in West Africa. (Linked to SLO 1.2)
12. Analyse the role of colonial influences in shaping archaeological practice. (Linked to SLO 1.3)
13. Evaluate the contributions of African scholars and institutions to archaeology. (Linked to SLO 1.4)



14. Describe methodological approaches and innovations in West African archaeology.
(Linked to SLO 1.5)

15. Assess contemporary challenges and prospects for archaeology in West Africa. (Linked to SLO 1.6)

Answers To Concept Check Questions 1

Objective questions

1. Pollen
2. Documentation
3. Antiquarianism
4. Chronologies
5. Looting

Short-answer questions

6. Ancient environmental conditions that shaped human existence.
7. Migration closer to rivers during dry phases.
8. Removal of artefacts without proper records.
9. Excavations of key sites or heritage preservation.
10. Decolonising archaeology or expanding training opportunities.

Long-answer questions

11. **Basic response:** Climatic changes influenced settlement shifts and farming opportunities.

Value-added response: They reveal resilience and innovation in human adaptation strategies.

12. **Basic response:** Colonial influences emphasised artefacts for European museums.

Value-added response: They imposed European frameworks, marginalising indigenous voices.



13. **Basic response:** African scholars contributed through excavations and training.

Value-added response: They reshaped archaeology to reflect African perspectives and global standards.

14. **Basic response:** Approaches include radiocarbon dating, GIS, and community archaeology.

Value-added response: These innovations improve accuracy and empower communities in heritage management.

15. **Basic response:** Challenges include funding and looting.

Value-added response:

Prospects involve collaboration, digital documentation, and decolonisation of interpretations.

Answers To Pilot Questions 1

Part 1.1

1. Ancient environmental conditions.
2. Pollen analysis.
3. Climatic changes influenced settlement shifts.
4. Migration closer to rivers.
5. It helps reconstruct cultural heritage.

Part 1.2

1. Explorers and antiquarians.
2. Lack of documentation.
3. As trophies for European museums.
4. Imposing European frameworks.
5. To ensure inclusivity and ethics.

Part 1.3

1. Establishment of universities and centres.



2. Offering archaeology programmes.
3. By introducing local perspectives.
4. Excavations or theoretical approaches.
5. It ensures cultural sensitivity.

Part 1.4

1. Radiocarbon dating.
2. Involving local communities.
3. Looting.
4. Collaboration and training.
5. To reflect African perspectives.



References And Attributions 1

- **Figures and Boxes suggested in Series 1:**

- Figure 1.1 Climatic changes in West Africa
- Box 1.2 Human adaptation to palaeoenvironmental changes
- Figure 1.3 Early explorers and antiquarians in West Africa
- Box 1.4 Colonial perspectives on archaeology in West Africa
- Figure 1.5 Establishment of universities and research centres in West African archaeology
- Box 1.6 Contributions of African scholars to archaeology
- Figure 1.7 Methodological approaches and innovations in West African archaeology
- Box 1.8 Contemporary challenges and future directions in West African archaeology

- **AI prompt suggestions used for illustration placeholders:**

- Diagrams showing climatic changes, explorers, institutions, and methodological approaches.
- Boxes summarising adaptations, colonial perspectives, contributions, and challenges.

- **Open Educational Resource (OER) search strings suggested:**

- “West Africa palaeoenvironment climatic changes diagram OER”
- “West Africa human adaptation palaeoenvironment OER”
- “West Africa archaeology early explorers antiquarians OER”
- “colonial archaeology perspectives West Africa OER”
- “West Africa archaeology universities research centres OER”



- “African archaeologists contributions West Africa OER”
- “West Africa archaeology methodological approaches innovations OER”
- “West Africa archaeology challenges future directions OER”
- **General references (APA style):**
 - Connah, G. (2004). *African archaeology: A critical introduction*. Cambridge University Press.
 - Shaw, T. (1978). *Nigeria: Its archaeology and early history*. Thames and Hudson.
 - McIntosh, S. K. (1999). *Beyond chiefdoms: Pathways to complexity in Africa*. Cambridge University Press.
 - Stahl, A. B. (2005). *African archaeology: A critical introduction*. Blackwell.



ARC302 Series 2 Anglophone and Francophone Traditions in West African Archaeology

- **Part 2.1 Historical background of Anglophone archaeology**
 - 2.1.1 Early development in English-speaking West Africa
 - 2.1.2 Key institutions and scholars
- **Part 2.2 Historical background of Francophone archaeology**
 - 2.2.1 Early development in French-speaking West Africa
 - 2.2.2 Key institutions and scholars
- **Part 2.3 Comparative traditions and approaches**
 - 2.3.1 Methodological differences between Anglophone and Francophone archaeology
 - 2.3.2 Case studies illustrating contrasting practices
- **Part 2.4 Contemporary relevance and integration**
 - 2.4.1 Collaboration and cross-regional research
 - 2.4.2 Towards a unified West African archaeological tradition

Introduction

In the last Series, we examined West African palaeoenvironments and the development of archaeology, focusing on how environmental changes and institutional growth shaped the discipline. This Series now turns to Anglophone and Francophone traditions, which represent two distinct yet interconnected approaches to archaeology in West Africa. Understanding these traditions is essential because they reveal how colonial legacies, languages, and institutions influenced archaeological practice.

The aim of this Series is to explain the historical development of Anglophone and Francophone archaeology, compare their traditions and approaches, and highlight their contemporary relevance for integrated research in West Africa.



We shall commence this Series by exploring the historical background of Anglophone archaeology, focusing on its early development and key institutions. Next, we will move on to the historical background of Francophone archaeology, considering its growth and major scholars. Afterwards, we will continue with comparative traditions and approaches, examining methodological differences and case studies. Finally, we will conclude with contemporary relevance and integration, highlighting collaboration and the move towards a unified West African archaeological tradition.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- **SLO 2.1** describe the historical development of Anglophone archaeology in West Africa,
- **SLO 2.2** identify key institutions and scholars in Anglophone archaeology,
- **SLO 2.3** explain the historical development of Francophone archaeology in West Africa,
- **SLO 2.4** identify key institutions and scholars in Francophone archaeology,
- **SLO 2.5** analyse methodological differences between Anglophone and Francophone archaeology,
- **SLO 2.6** evaluate case studies illustrating contrasting practices, and
- **SLO 2.7** assess contemporary relevance and integration of Anglophone and Francophone traditions in West African archaeology.

2.1 Historical Background of Anglophone Archaeology

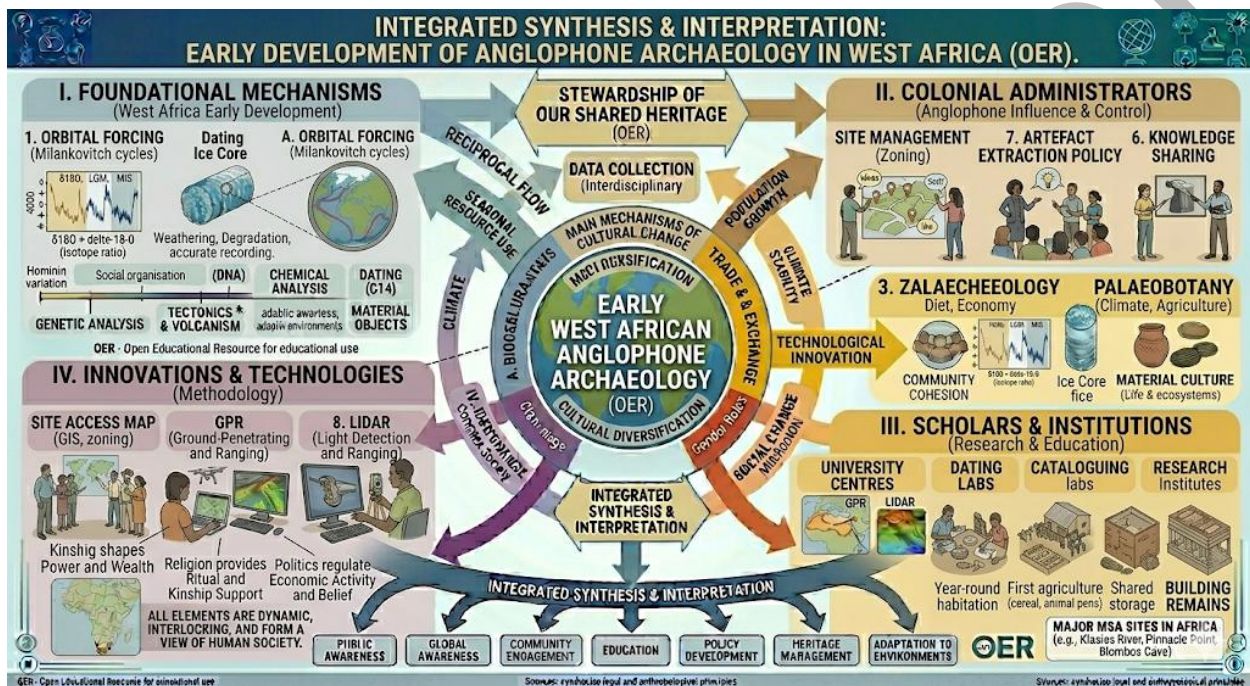
2.1.1 Early development in English-speaking West Africa

Anglophone archaeology refers to archaeological traditions and practices that developed in English-speaking countries of West Africa, such as Nigeria, Ghana, Sierra Leone, and The Gambia. Its early development was influenced by colonial administrators, missionaries, and



scholars who began documenting artefacts and sites during the nineteenth and early twentieth centuries.

These early efforts were often descriptive, focusing on collecting artefacts and recording monumental sites. Over time, however, systematic excavations and surveys began to emerge, laying the foundation for professional archaeology in the region.



Short description: Diagram showing early development of Anglophone archaeology in West Africa.

Caption: Figure 2.1 Early development of Anglophone archaeology in West Africa

Fill in the blank: Early Anglophone archaeology in West Africa was influenced by colonial administrators, missionaries, and _____.

2.1.2 Key institutions and scholars

The growth of Anglophone archaeology was supported by the establishment of **institutions** such as universities and museums, which provided platforms for research and training. In Nigeria, for



example, the University of Ibadan played a pioneering role in developing archaeology as an academic discipline.

Prominent **scholars** such as Thurstan Shaw contributed significantly through excavations, publications, and training of African archaeologists. Their work helped to professionalise archaeology and ensure that research was conducted with greater methodological rigour.

Box 2.2 Key institutions and scholars in Anglophone archaeology

Category	Key Actor / Entity	Major Contribution
Pioneer Scholar	Thurstan Shaw	Led the landmark excavations at Igbo-Ukwu ; founded the archaeology department at the University of Ibadan.
Academic Hubs	University of Ibadan & University of Ghana (Legon)	The "Twin Pillars" of West African archaeological training; established the first degree programs in the region.
Research Bodies	National Commission for Museums and Monuments (NCMM)	The Nigerian federal agency responsible for managing all national museums and heritage sites.
Professional Body	West African Archaeological Association (WAAA)	A regional platform for Anglophone and Francophone scholars to collaborate and share research.

Fill in the blank: The University of _____ played a pioneering role in developing archaeology in Nigeria.



Pilot questions 2.1

1. What does Anglophone archaeology refer to?
2. Mention one factor that influenced its early development.
3. Name one institution that supported the growth of Anglophone archaeology.
4. Who was a prominent scholar in Anglophone archaeology?
5. Why were universities important in the development of archaeology?

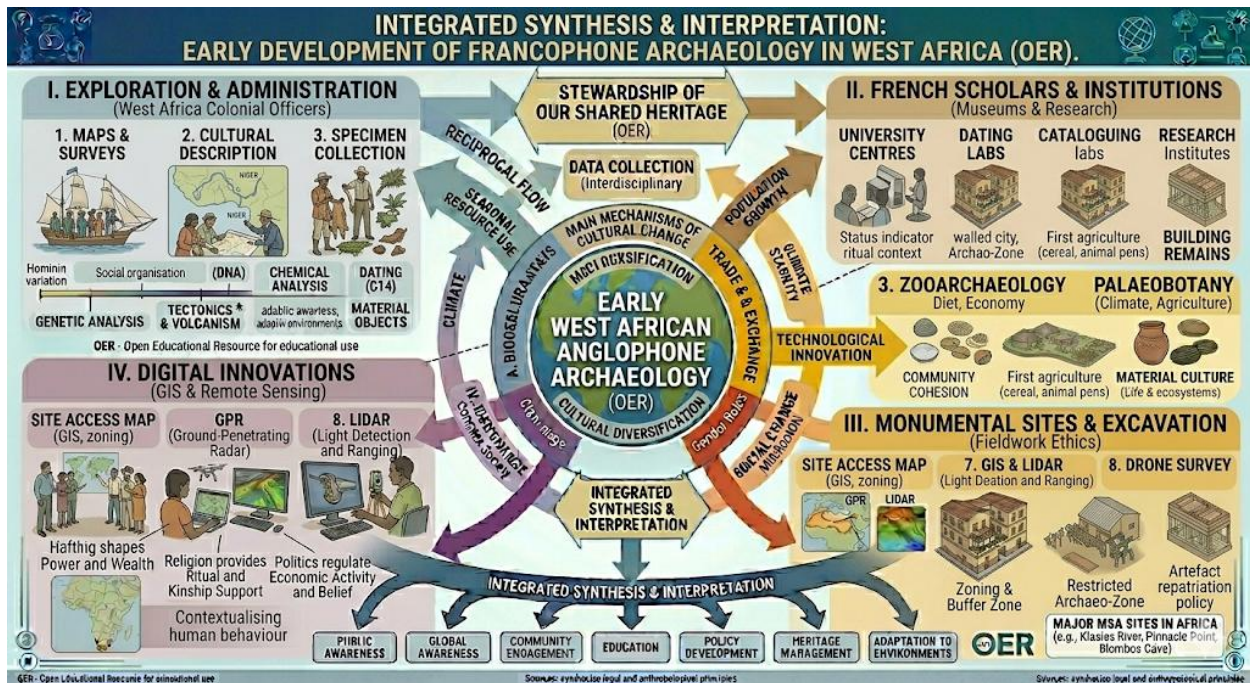
2.2 Historical Background of Francophone Archaeology

2.2.1 Early development in French-speaking West Africa

Francophone archaeology refers to archaeological traditions and practices that developed in French-speaking countries of West Africa, such as Senegal, Mali, Niger, and Côte d'Ivoire. Its early development was closely tied to French colonial administration, which often emphasised the documentation of monumental sites and artefacts for display in metropolitan museums.

French scholars and colonial officers conducted surveys and excavations, focusing on sites that highlighted imperial interests. While these efforts produced valuable records, they were often shaped by colonial perspectives that prioritised European interpretations over indigenous narratives.





Short description: Diagram showing early development of Francophone archaeology in West Africa.

Caption: **Figure 2.3 Early development of Francophone archaeology in West Africa**

Fill in the blank: Early Francophone archaeology often prioritised European interpretations over _____ narratives.

2.2.2 Key institutions and scholars

The growth of Francophone archaeology was supported by **institutions** such as the Institut Fondamental d'Afrique Noire (IFAN) in Dakar, which became a leading centre for archaeological research in West Africa. IFAN coordinated excavations, published findings, and trained researchers, thereby shaping the discipline across Francophone countries.

Prominent **scholars** such as Raymond Mauny contributed significantly to the study of West African prehistory. Their work provided detailed chronologies and interpretations, although often



framed within colonial perspectives. Over time, African scholars began to challenge these frameworks, introducing local perspectives and reshaping Francophone archaeology.

Box 2.4 Key institutions and scholars in Francophone archaeology

Category	Key Actor / Entity	Major Contribution
Research Hub	IFAN (Institut Fondamental d'Afrique Noire)	The primary scientific research institute for French West Africa; centralized the study of archaeology, ethnography, and natural sciences.
Pioneer Scholar	Raymond Mauny	Published the monumental <i>Tableau Géographique de l'Ouest Africain au Moyen Âge</i> ; reconstructed ancient trade routes and medieval African states.
Leading Scholar	Hamady Bocoum	Director of IFAN and the Museum of Black Civilizations; a key voice in the study of African metallurgy and heritage management.
Academic Center	Cheikh Anta Diop University (UCAD)	Based in Dakar, it became the intellectual heart of Francophone African archaeology and carbon-14 dating.

Fill in the blank: The Institut Fondamental d'Afrique Noire (IFAN) in _____ became a leading centre for archaeological research.

Pilot questions 2.2

1. What does Francophone archaeology refer to?



2. Mention one factor that influenced its early development.
3. Name one institution that supported the growth of Francophone archaeology.
4. Who was a prominent scholar in Francophone archaeology?
5. Why did African scholars challenge colonial frameworks in archaeology?

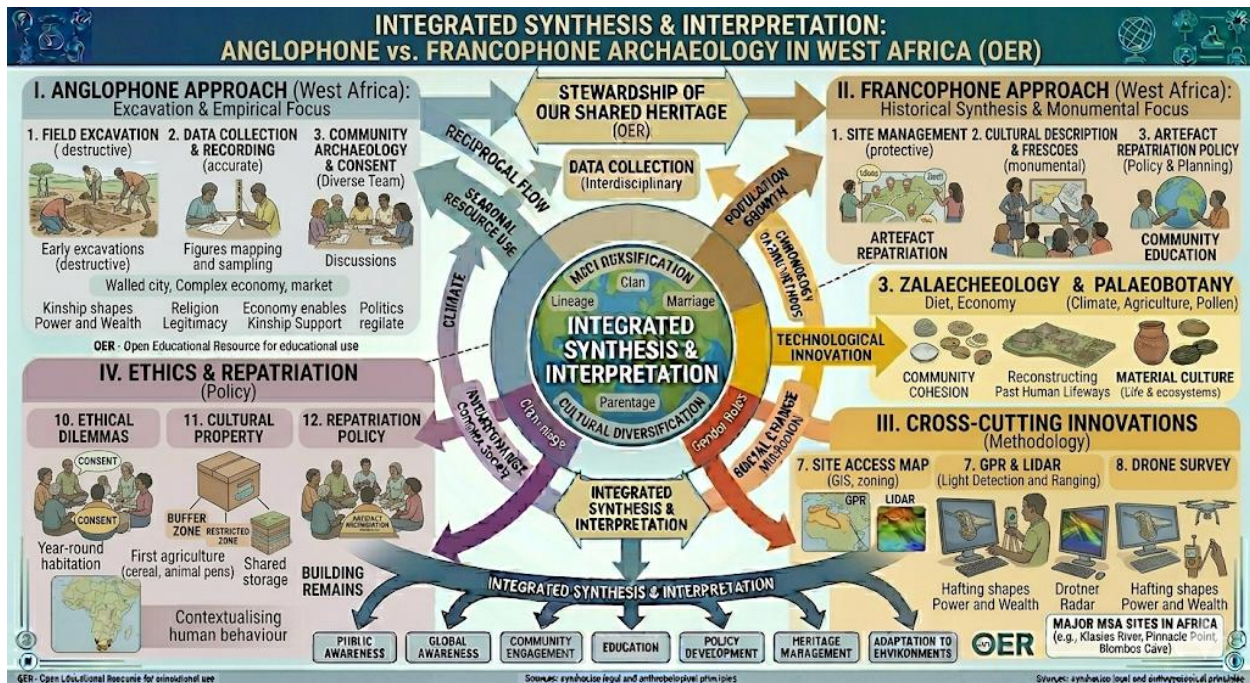
2.3 Comparative Traditions and Approaches

2.3.1 Methodological differences between Anglophone and Francophone archaeology

Anglophone and Francophone archaeology in West Africa developed under different colonial and academic traditions, leading to distinct **methodological approaches**. Anglophone archaeology often emphasised scientific excavation techniques, stratigraphy, and cultural chronology, influenced by British academic traditions. Francophone archaeology, shaped by French scholarship, tended to focus more on monumental sites, descriptive surveys, and historical synthesis.

These differences reflect broader colonial legacies, with Anglophone traditions leaning towards empirical fieldwork and Francophone traditions emphasising historical interpretation. Today, scholars recognise the value of both approaches and increasingly integrate them to provide a more holistic understanding of West African prehistory.





Short description: Comparative diagram showing methodological differences between Anglophone and Francophone archaeology.

Caption: **Figure 2.5 Methodological differences between Anglophone and Francophone archaeology**

Fill in the blank: Anglophone archaeology emphasised excavation and stratigraphy, while Francophone archaeology focused on _____ sites and surveys.

2.3.2 Case studies illustrating contrasting practices

Case studies provide concrete examples of how Anglophone and Francophone traditions differ in practice. In Nigeria, Anglophone archaeologists conducted systematic excavations at sites such as Igbo-Ukwu, emphasising stratigraphy and artefact analysis. In contrast, Francophone archaeologists in Senegal focused on monumental sites like megalithic stone circles, producing descriptive surveys and historical syntheses.



These contrasting practices highlight the strengths and limitations of each tradition. Anglophone approaches often provide detailed chronological frameworks, while Francophone approaches offer broader cultural narratives. Together, they enrich our understanding of West African archaeology by combining precision with synthesis.

Box 2.6 Case studies of Anglophone and Francophone archaeology

Feature	Igbo-Ukwu (Anglophone)	Stone Circles (Francophone)
Environment	Tropical Forest zone (Nigeria).	Savanna-Sahelian zone (Senegal/Gambia).
Key Focus	High-status burial and ritual repositories.	Megalithic architecture and collective burial.
Material Culture	Intricate bronze, copper, and glass beads.	Laterite monoliths, iron weaponry, and pottery.
Scholarly Approach	Driven by university departments (U. Ibadan).	Driven by centralized research institutes (IFAN).

Fill in the blank: Igbo-Ukwu is an example of systematic excavation in Anglophone archaeology, while Senegal's stone circles illustrate _____ surveys in Francophone archaeology.

Pilot questions 2.3

1. What is one methodological difference between Anglophone and Francophone archaeology?
2. Which tradition emphasised stratigraphy and cultural chronology?



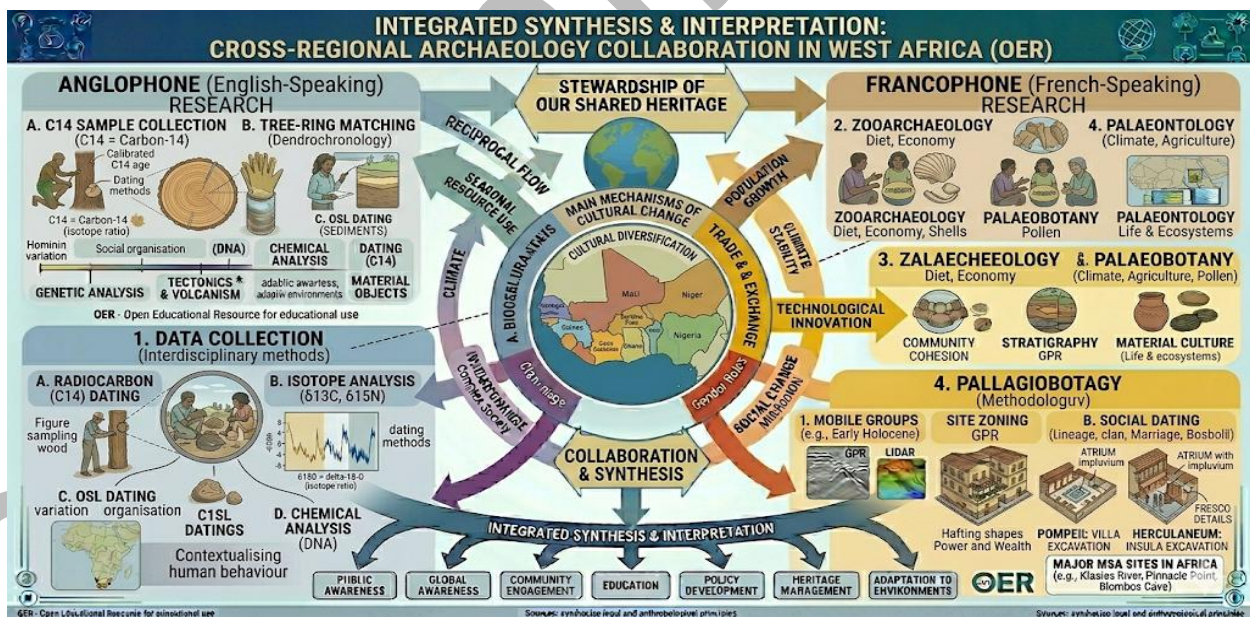
3. Name one site studied by Anglophone archaeologists.
4. Name one site studied by Francophone archaeologists.
5. Why is integrating both traditions valuable today?

2.4 Contemporary Relevance and Integration

2.4.1 Collaboration and cross-regional research

Modern archaeology in West Africa increasingly emphasises **collaboration**, which means scholars from Anglophone and Francophone traditions working together across linguistic and national boundaries. This collaboration allows for shared resources, comparative studies, and the integration of diverse perspectives.

Cross-regional research projects, such as joint excavations and conferences, have helped to bridge methodological differences and promote mutual learning. These efforts also strengthen the visibility of West African archaeology in global scholarship.



Short description: Diagram showing collaboration between Anglophone and Francophone archaeologists in West Africa.

Caption: **Figure 2.7 Collaboration and cross-regional research in West African archaeology**



Fill in the blank: Cross-regional research projects such as joint excavations and _____ help bridge methodological differences.

2.4.2 Towards a unified West African archaeological tradition

The future of archaeology in West Africa lies in developing a more **unified tradition**, where Anglophone and Francophone approaches complement rather than compete with each other. This involves recognising the strengths of both traditions and integrating them into a shared framework that reflects African perspectives.

A unified tradition also prioritises heritage preservation, community involvement, and ethical research practices. By combining scientific rigour with cultural sensitivity, West African archaeology can contribute meaningfully to both local identity and global knowledge.

Box 2.8 Towards a unified West African archaeological tradition

Core Element	Strategic Action	Goal for the Tradition
Integration	Harmonizing research across modern borders (e.g., the Sahelian empires).	Holistic History: Moving from "national" archaeology to "regional" history.
Heritage Preservation	Standardizing site protection laws and museum practices.	Collective Security: Creating a regional front against the illegal antiquities trade.
Ethics	Grounding research in indigenous values and community consent.	Social Justice: Ensuring archaeology serves African communities, not just academia.



Core Element	Strategic Action	Goal for the Tradition
OER Development	Creating shared, multilingual digital educational platforms.	Educational Sovereignty: Removing Western "paywalls" from African history.

Fill in the blank: A unified West African archaeological tradition prioritises heritage preservation and _____ involvement.

Pilot questions 2.4

1. What does collaboration in West African archaeology involve?
2. Mention one benefit of cross-regional research.
3. What is meant by a unified archaeological tradition?
4. Name one element of a unified tradition.
5. Why is integration of Anglophone and Francophone approaches important?

Series Summary

This Series examined Anglophone and Francophone traditions in West African archaeology, showing how colonial legacies, institutions, and scholarly practices shaped the discipline. Its purpose was to highlight the differences and similarities between these traditions and to explain their relevance for contemporary archaeological research. Understanding these traditions is important because they reveal how language, culture, and politics influenced the interpretation of West Africa's past.

We began with the historical background of Anglophone archaeology, focusing on its early development and key institutions. Then we moved to Francophone archaeology, considering its colonial roots and major centres such as IFAN. Afterwards, we compared the two traditions,



analysing methodological differences and case studies that illustrate contrasting practices. Finally, we concluded with contemporary relevance, emphasising collaboration and the move towards a unified West African archaeological tradition. By completing this Series, you should now be able to describe the historical development of both traditions, identify key institutions and scholars, analyse methodological differences, evaluate case studies, and assess the importance of integration, as outlined in the Series Learning Outcomes.

Glossary Of Terms

- **Anglophone archaeology:** Archaeological traditions developed in English-speaking West African countries.
- **Case study:** A detailed example used to illustrate archaeological practices or traditions.
- **Francophone archaeology:** Archaeological traditions developed in French-speaking West African countries.
- **IFAN (Institut Fondamental d'Afrique Noire):** A major research centre in Dakar that shaped Francophone archaeology.
- **Methodological approaches:** Specific techniques and frameworks used to investigate and interpret archaeological evidence.
- **Stratigraphy:** The study of layers of soil and deposits to establish chronological sequences in archaeology.
- **Unified tradition:** An integrated approach combining Anglophone and Francophone practices to reflect African perspectives.



Concept Check Questions 2

Objective questions

1. Anglophone archaeology refers to traditions developed in _____-speaking countries of West Africa. (Linked to SLO 2.1)
2. The University of _____ played a pioneering role in Anglophone archaeology. (Linked to SLO 2.2)
3. Francophone archaeology was strongly influenced by French _____ administration. (Linked to SLO 2.3)
4. The Institut Fondamental d'Afrique Noire (IFAN) is located in _____. (Linked to SLO 2.4)
5. Anglophone archaeology emphasised stratigraphy, while Francophone archaeology focused on _____ sites. (Linked to SLO 2.5)

Short-answer questions

6. Define Anglophone archaeology. (Linked to SLO 2.1)
7. Mention one key institution in Anglophone archaeology. (Linked to SLO 2.2)
8. Define Francophone archaeology. (Linked to SLO 2.3)
9. Name one prominent scholar in Francophone archaeology. (Linked to SLO 2.4)
10. Why is integrating Anglophone and Francophone traditions valuable? (Linked to SLO 2.7)

Long-answer questions

11. Explain the historical development of Anglophone archaeology in West Africa. (Linked to SLO 2.1, 2.2)
12. Analyse the historical development of Francophone archaeology in West Africa. (Linked to SLO 2.3, 2.4)



13. Evaluate methodological differences between Anglophone and Francophone archaeology. (Linked to SLO 2.5)
14. Discuss case studies that illustrate contrasting practices in Anglophone and Francophone archaeology. (Linked to SLO 2.6)
15. Assess the contemporary relevance of collaboration and integration in West African archaeology. (Linked to SLO 2.7)

Answers To Concept Check Questions 2

Objective questions

1. English
2. Ibadan
3. Colonial
4. Dakar
5. Monumental

Short-answer questions

6. Archaeological traditions in English-speaking West African countries.
7. University of Ibadan.
8. Archaeological traditions in French-speaking West African countries.
9. Raymond Mauny.
10. It combines strengths of both traditions and reflects African perspectives.

Long-answer questions

11. **Basic response:** Anglophone archaeology developed through colonial administrators and later universities. **Value-added response:** It evolved into a professional discipline with systematic excavations and African scholarly leadership.



12. **Basic response:** Francophone archaeology developed under French colonial administration and institutions like IFAN. **Value-added response:** It produced detailed records but was shaped by colonial perspectives, later challenged by African scholars.
13. **Basic response:** Anglophone traditions emphasised stratigraphy, while Francophone traditions focused on descriptive surveys. **Value-added response:** These differences reflect colonial legacies but can be integrated for holistic interpretations.
14. **Basic response:** Igbo-Ukwu illustrates Anglophone excavation, while Senegal's stone circles illustrate Francophone surveys. **Value-added response:** Together, they show how different practices enrich our understanding of West African archaeology.
15. **Basic response:** Collaboration helps bridge traditions and promote integration. **Value-added response:** It strengthens global visibility, supports heritage preservation, and ensures inclusive interpretations.

Answers To Pilot Questions 2

Part 2.1

1. Archaeology in English-speaking West Africa.
2. Colonial administrators.
3. University of Ibadan.
4. Thurstan Shaw.
5. They provided training and research platforms.

Part 2.2

1. Archaeology in French-speaking West Africa.
2. French colonial administration.
3. IFAN in Dakar.
4. Raymond Mauny.



5. To introduce local perspectives.

Part 2.3

1. Anglophone emphasised stratigraphy, Francophone emphasised surveys.
2. Anglophone.
3. Igbo-Ukwu.
4. Stone circles in Senegal.
5. It provides a holistic understanding.

Part 2.4

1. Scholars working across boundaries.
2. Shared resources and mutual learning.
3. Integration of traditions.
4. Heritage preservation.
5. It combines strengths and reflects African perspectives.



References And Attributions 2

- **Figures and Boxes suggested in Series 2:**
 - Figure 2.1 Early development of Anglophone archaeology in West Africa
 - Box 2.2 Key institutions and scholars in Anglophone archaeology
 - Figure 2.3 Early development of Francophone archaeology in West Africa
 - Box 2.4 Key institutions and scholars in Francophone archaeology
 - Figure 2.5 Methodological differences between Anglophone and Francophone archaeology
 - Box 2.6 Case studies of Anglophone and Francophone archaeology
 - Figure 2.7 Collaboration and cross-regional research in West African archaeology
 - Box 2.8 Towards a unified West African archaeological tradition
- **AI prompt suggestions used for illustration placeholders:**
 - Diagrams showing early development, methodological differences, and collaboration.
 - Boxes summarising institutions, scholars, case studies, and unified traditions.
- **Open Educational Resource (OER) search strings suggested:**
 - “Anglophone archaeology early development West Africa OER”
 - “Anglophone archaeology institutions scholars West Africa OER”
 - “Francophone archaeology early development West Africa OER”
 - “Francophone archaeology institutions scholars West Africa OER”
 - “Anglophone Francophone archaeology methodological differences West Africa OER”
 - “West Africa archaeology case studies Anglophone Francophone OER”



- “West Africa archaeology collaboration cross-regional research OER”
- “West Africa unified archaeological tradition OER”

- **General references (APA style):**

- Connah, G. (2004). *African archaeology: A critical introduction*. Cambridge University Press.
- Mauny, R. (1961). *Tableau géographique de l'Ouest africain au Moyen Âge*. IFAN.
- Shaw, T. (1978). *Nigeria: Its archaeology and early history*. Thames and Hudson.
- Stahl, A. B. (2005). *African archaeology: A critical introduction*. Blackwell.



ARC302 Series 3 Stone Age Sequences in West Africa and the Sahara

- **Part 3.1 The Lower Stone Age in West Africa and the Sahara**
 - 3.1.1 Early hominin presence and tool use
 - 3.1.2 Key sites and discoveries
- **Part 3.2 The Middle Stone Age in West Africa and the Sahara**
 - 3.2.1 Technological innovations and cultural practices
 - 3.2.2 Settlement patterns and subsistence strategies
- **Part 3.3 The Later Stone Age in West Africa and the Sahara**
 - 3.3.1 Microlithic technology and symbolic behaviour
 - 3.3.2 Rock art and cultural expressions
- **Part 3.4 Transition from Stone Age to Food Production**
 - 3.4.1 Environmental influences on change
 - 3.4.2 Archaeological evidence for early domestication

Introduction

The Stone Age represents the longest and most formative period of human history, and in West Africa and the Sahara it provides crucial insights into the origins of technology, settlement, and cultural expression. By studying the Stone Age sequences, archaeologists reconstruct how early humans adapted to changing environments and laid the foundations for later societies.

The aim of this Series is to trace the sequence of the Stone Age in West Africa and the Sahara, highlighting technological developments, cultural practices, and the transition towards food production.

We shall commence this Series by examining the Lower Stone Age, focusing on early hominin presence and tool use. Next, we will move on to the Middle Stone Age, considering technological innovations and settlement strategies. Afterwards, we will continue with the Later



Stone Age, exploring microlithic technology, symbolic behaviour, and rock art. Finally, we will conclude with the transition from the Stone Age to food production, analysing environmental influences and archaeological evidence for domestication.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- **SLO 3.1** describe the characteristics of the Lower Stone Age in West Africa and the Sahara,
- **SLO 3.2** explain technological innovations and cultural practices of the Middle Stone Age,
- **SLO 3.3** analyse microlithic technology and symbolic behaviour in the Later Stone Age,
- **SLO 3.4** evaluate the significance of rock art and cultural expressions in the Later Stone Age, and
- **SLO 3.5** assess the transition from the Stone Age to food production, with reference to environmental influences and archaeological evidence.

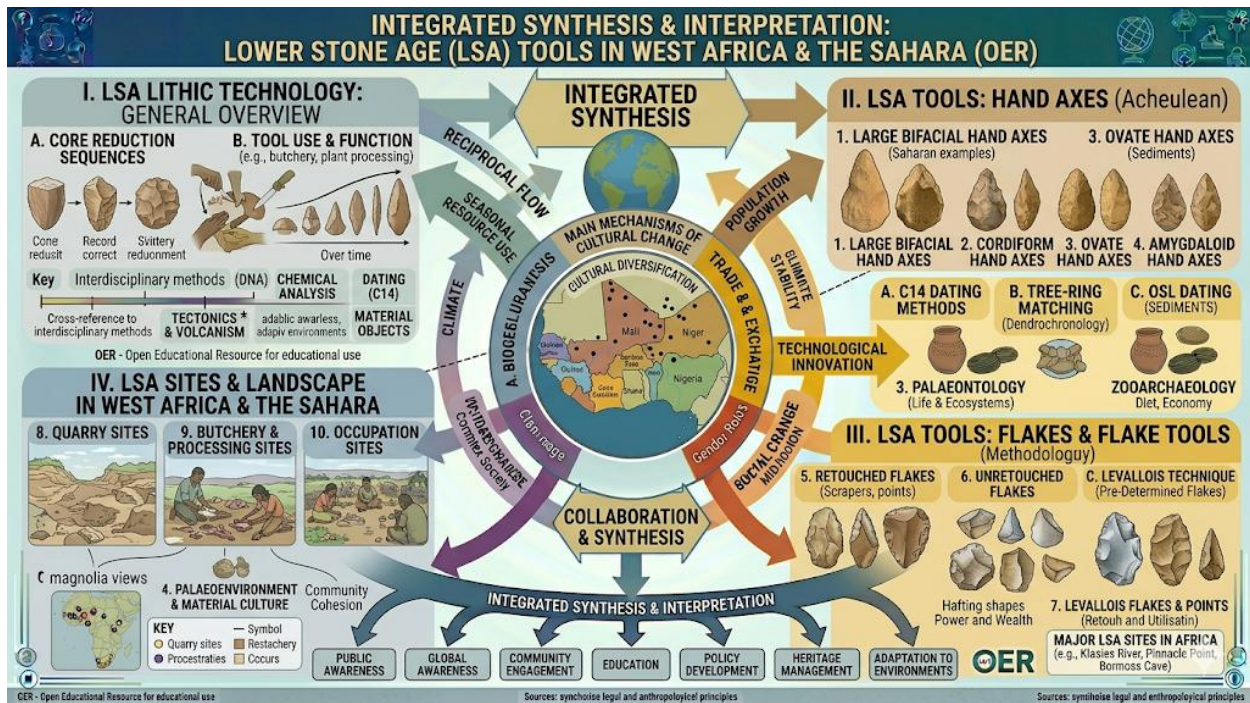
3.1 The Lower Stone Age in West Africa and the Sahara

3.1.1 Early hominin presence and tool use

The **Lower Stone Age** refers to the earliest phase of human technological development, marked by the use of simple stone tools. In West Africa and the Sahara, evidence of early **hominins** (ancient human ancestors) has been found in association with crude implements such as hand axes and flakes. These tools were primarily used for cutting, scraping, and processing food.

Archaeologists reconstruct this period by studying stone artefacts and fossil remains, which reveal how early humans adapted to their environments. The Lower Stone Age demonstrates the beginnings of human ingenuity and survival strategies in Africa.





Short description: Diagram showing Lower Stone Age tools such as hand axes and flakes.

Caption: **Figure 3.1 Lower Stone Age tools in West Africa and the Sahara**

Fill in the blank: The Lower Stone Age is marked by the use of simple _____ tools.

3.1.2 Key sites and discoveries

Important **archaeological sites** in West Africa and the Sahara provide evidence of Lower Stone Age activity. Sites such as those in Nigeria, Mali, and Mauritania have yielded stone tools and fossil remains that help trace early human occupation. These discoveries show that West Africa was part of the broader story of human evolution, contributing to our understanding of how hominins spread across the continent.

Key discoveries include Acheulean hand axes, which are characteristic of the Lower Stone Age. These artefacts demonstrate technological skill and adaptation to diverse environments.



Box 3.2 Key Lower Stone Age sites in West Africa and the Sahara

Country	Key Sites / Regions	Archaeological Significance
Nigeria	Jos Plateau (Mai Lumba)	Known for Acheulean handaxes and cleavers found in alluvial deposits; provides evidence of early human occupation in the savanna-forest transition.
Mali	Ouniéga / Adrar des Ifoghas	Contains extensive surface scatters of Acheulean tools; indicates that the Sahara was once significantly wetter and supported human migration.
Mauritania	El Beyyed / Richat Structure	One of the most famous Acheulean sites in the Sahara; features "in situ" workshops with thousands of bifaces (handaxes).

Fill in the blank: Acheulean _____ are characteristic artefacts of the Lower Stone Age.

Pilot questions 3.1

1. What does the Lower Stone Age refer to?
2. Name one type of tool used during the Lower Stone Age.
3. Mention one country in West Africa with Lower Stone Age sites.
4. What is the significance of Acheulean hand axes?
5. Why are archaeological sites important for reconstructing early human history?

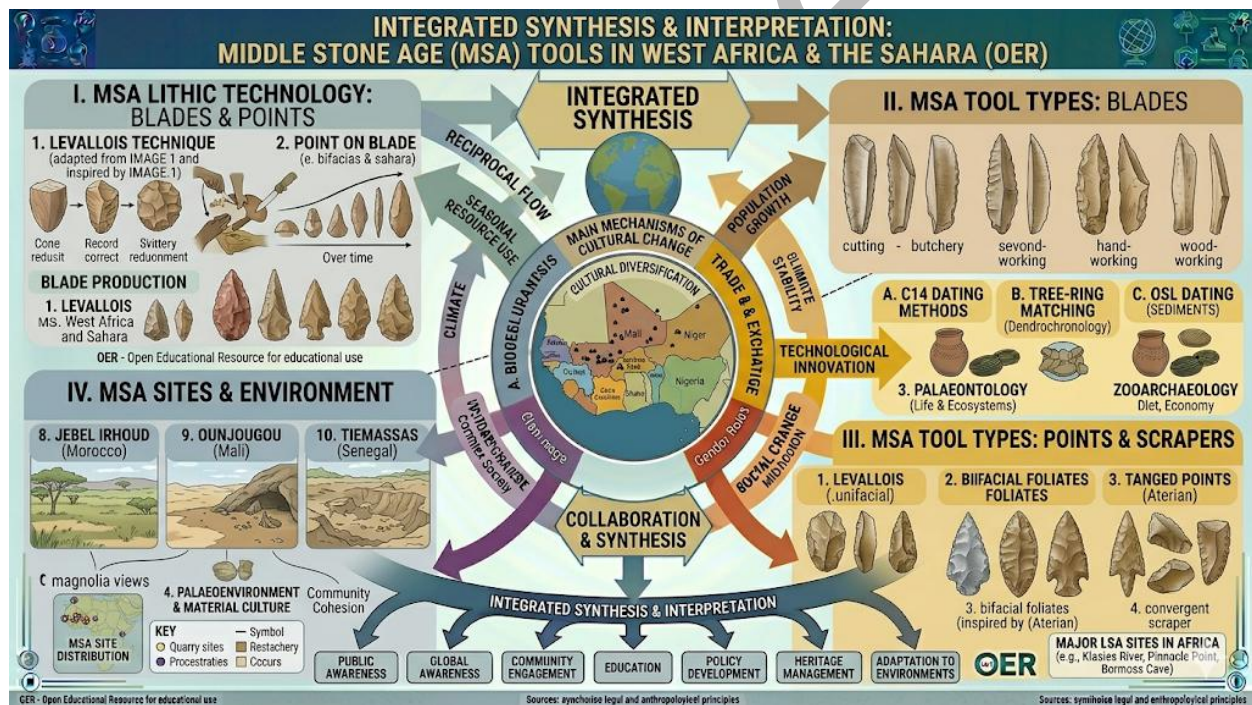


3.2 The Middle Stone Age in West Africa and the Sahara

3.2.1 Technological innovations and cultural practices

The **Middle Stone Age (MSA)** marks a significant stage in human development, characterised by more advanced stone tool technologies. Tools from this period include blades, points, and scrapers, which were more refined than the crude implements of the Lower Stone Age. These innovations reflect growing skill and planning in tool production.

Cultural practices also became more complex during the MSA. Evidence suggests the use of pigments, possibly for symbolic or decorative purposes, and the beginnings of social organisation. These developments highlight the increasing cognitive abilities of early humans in West Africa and the Sahara.



Short description: Diagram showing Middle Stone Age tools such as blades, points, and scrapers.

Caption: **Figure 3.3 Middle Stone Age tools in West Africa and the Sahara**

Fill in the blank: The Middle Stone Age is characterised by more advanced stone tools such as blades and _____.



3.2.2 Settlement patterns and subsistence strategies

Archaeological evidence indicates that Middle Stone Age communities adopted diverse **settlement patterns**, often choosing locations near rivers, lakes, and resource-rich areas. These choices reflect strategic planning for survival and access to food and water.

Subsistence strategies included hunting, gathering, and fishing, with evidence of specialised tools for these activities. The MSA shows a shift towards more organised ways of living, with communities adapting to varied environments across West Africa and the Sahara.

Box 3.4 Settlement patterns and subsistence strategies in the Middle Stone Age

Aspect	Strategy & Pattern	Environmental Driver
Settlement	Riverine Focus: Camps were strategically located near permanent water sources and high-ground overlooks.	Reliability: Rivers provided water, raw materials (pebbles), and predictable animal migration paths.
Hunting	Targeted Foraging: Use of projectile points (spears) to hunt medium-to-large mammals like bovids and hippos.	Protein Access: High-yield hunting supported larger social groups and longer stays in one location.
Fishing	Aquatic Exploitation: Early evidence of harpooning and gathering shellfish in Saharan "palaeo-lakes."	Diversification: Reducing risk by exploiting both land and water resources during humid phases.

Fill in the blank: Middle Stone Age communities often settled near rivers and _____ to access resources.



Pilot questions 3.2

1. What characterises the Middle Stone Age?
2. Name one type of tool used during the MSA.
3. Mention one cultural practice associated with the MSA.
4. Why did communities settle near rivers and lakes?
5. What subsistence strategies were common during the MSA?

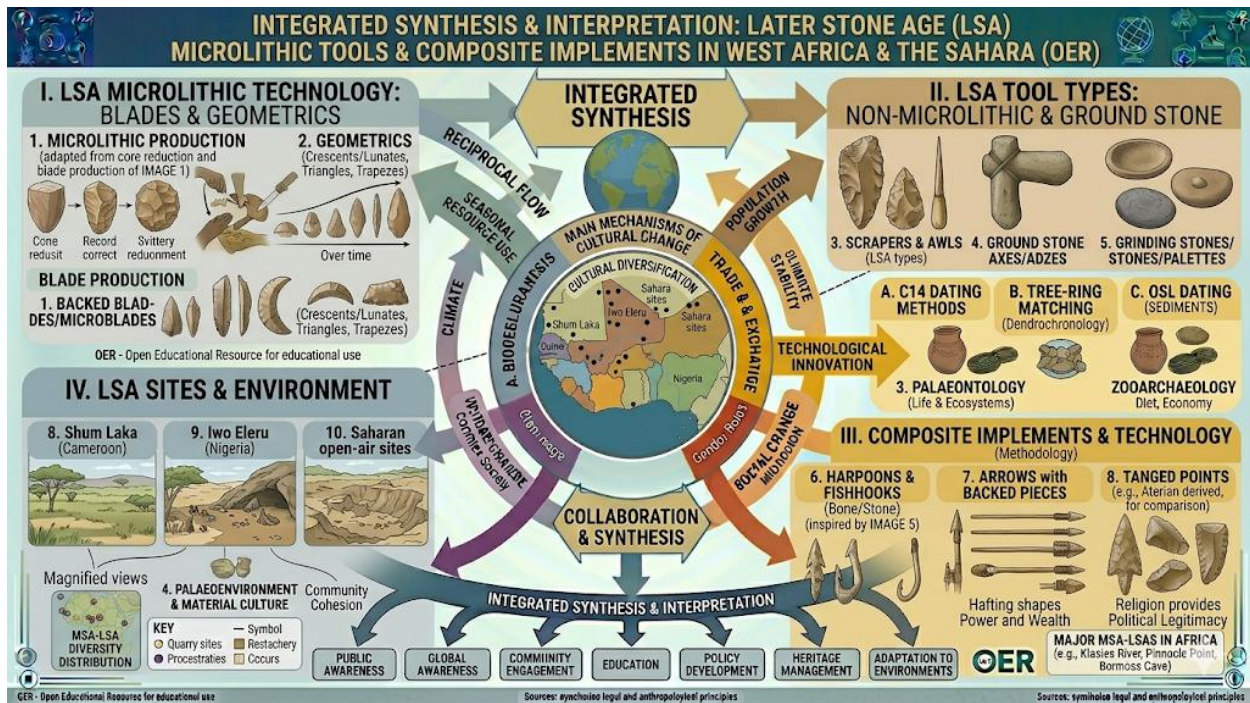
3.3 The Later Stone Age in West Africa and the Sahara

3.3.1 Microlithic technology and symbolic behaviour

The **Later Stone Age (LSA)** is distinguished by the development of **microlithic technology**, which refers to the production of small, finely worked stone tools. These tools were often mounted on wood or bone to create composite implements such as arrows and spears. This innovation reflects advanced planning and craftsmanship, as well as the ability to exploit a wider range of resources.

Symbolic behaviour also became more evident during the LSA. Archaeologists have found evidence of ornaments, beads, and the use of pigments, suggesting that humans were engaging in symbolic communication and cultural expression. These practices highlight the growing complexity of social life during this period.





Short description: Diagram showing microlithic tools and composite implements from the Later Stone Age.

Caption: Figure 3.5 Microlithic technology in the Later Stone Age

Fill in the blank: Microlithic technology refers to the production of small, finely worked _____ tools.

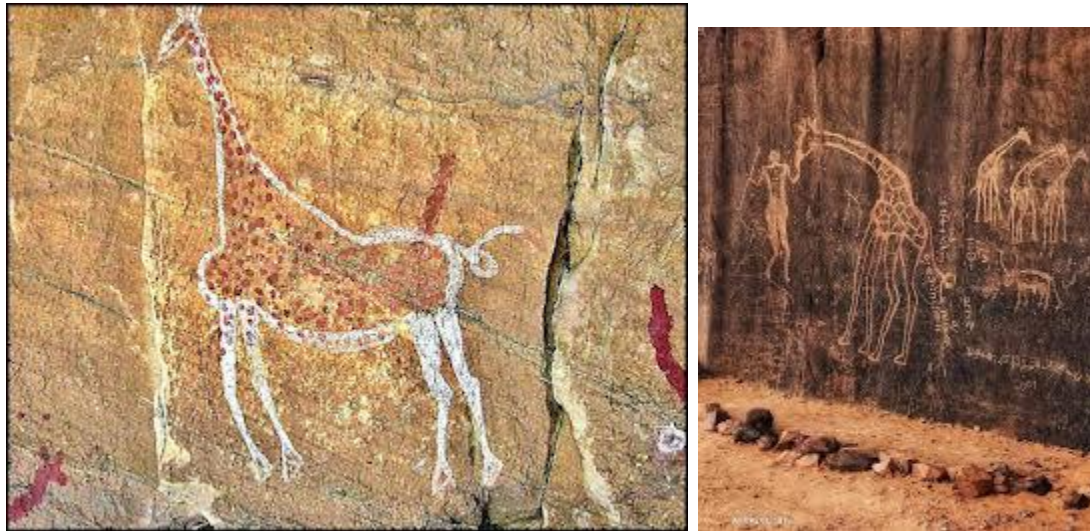
3.3.2 Rock art and cultural expressions

One of the most striking features of the Later Stone Age in the Sahara is the presence of **rock art**, which consists of engravings and paintings on cave walls and rock surfaces. These artworks depict animals, hunting scenes, and symbolic motifs, offering valuable insights into the beliefs and daily lives of prehistoric communities.

Rock art is considered a form of cultural expression, reflecting both artistic creativity and social communication. It provides archaeologists with evidence of symbolic thought and helps reconstruct the cultural landscapes of the Sahara and West Africa during the LSA.



Short description: Image showing rock art from the Sahara with depictions of animals and hunting scenes. Caption: **Plate 3.6 Rock art in the Later Stone Age Sahara**



Fill in the blank: Rock art provides evidence of symbolic thought and _____ communication in prehistoric communities.

Pilot questions 3.3

1. What characterises microlithic technology?
2. Name one type of composite implement created during the LSA.
3. Mention one example of symbolic behaviour in the LSA.
4. What is rock art?
5. Why is rock art important for reconstructing prehistoric culture?

3.4 Transition from Stone Age to Food Production

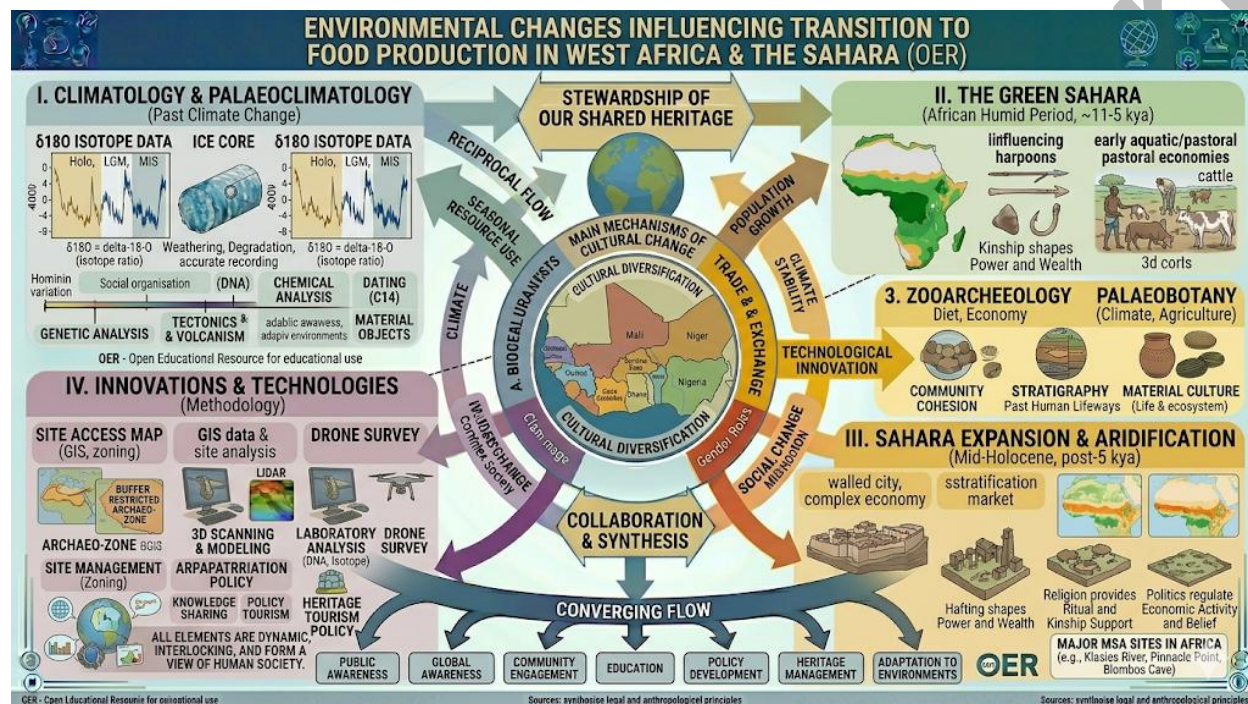
3.4.1 Environmental influences on change

The transition from the Stone Age to food production in West Africa and the Sahara was strongly influenced by **environmental changes**, particularly shifts in climate and vegetation. As the Sahara experienced alternating wet and dry phases, communities had to adapt their survival



strategies. During wetter periods, fertile soils and abundant water encouraged experimentation with plant cultivation, while drier phases pushed groups to innovate in food storage and mobility.

This gradual adaptation shows how human societies responded to ecological pressures, laying the foundation for domestication and settled life.



Short description: Diagram showing environmental changes influencing the transition to food production in West Africa and the Sahara.

Caption: **Figure 3.7 Environmental influences on the transition to food production**

Fill in the blank: Fertile soils and abundant _____ during wetter periods encouraged experimentation with plant cultivation.

3.4.2 Archaeological evidence for early domestication

Archaeologists have uncovered **evidence of early domestication**, including remains of cultivated plants and domesticated animals. Sites in regions such as Mali and Niger reveal traces of sorghum and millet cultivation, while faunal remains suggest the domestication of cattle and



goats. These findings indicate that communities were gradually shifting from foraging to farming and herding.

The archaeological record demonstrates that food production did not occur suddenly but was a long process of trial, adaptation, and innovation. This transition marks a turning point in human history, as it enabled permanent settlements and the growth of complex societies.

Box 3.8 Archaeological evidence for early domestication in West Africa and the Sahara

Domesticate	Key Archaeological Evidence	Primary Sites / Regions
Cattle (<i>Bos primigenius</i>)	Osteological (bone) changes; rock art depicting managed herds.	Enneri Bardagué (Chad), Nabta Playa (near border), Tassili n'Ajjer.
Pearl Millet	Carbonized seeds/impressions on pottery; specialized grinding stones.	Dhar Tichitt (Mauritania), Ounjougou (Mali), Kintampo (Ghana).
Sorghum	Charred remains; phytolith analysis (microscopic plant silica).	Lake Chad Basin, Middle Niger Valley, Eastern Sahel.
Goats / Sheep	Non-indigenous bone remains (introduced via Northeast Africa).	Haua Fteah (Libya/Sahara fringes), Various Saharan shelters.

Fill in the blank: Archaeological evidence of early domestication includes remains of sorghum, millet, cattle, and _____.



Pilot questions 3.4

1. What influenced the transition from the Stone Age to food production?
2. Mention one environmental factor that encouraged plant cultivation.
3. Name one crop cultivated during early domestication in West Africa.
4. Name one animal domesticated during this period.
5. Why is the transition to food production considered a turning point in human history?

Series Summary

This Series explored the Stone Age sequences in West Africa and the Sahara, highlighting their importance for understanding human evolution, technological development, and cultural expression. Its purpose was to trace the progression from the Lower Stone Age through the Middle and Later Stone Ages, culminating in the transition to food production. By examining these stages, learners gain insight into how early humans adapted to environmental changes and laid the foundations for complex societies.

We began with the Lower Stone Age, focusing on early hominin presence and simple tool use, before moving to the Middle Stone Age with its technological innovations and settlement strategies. We then studied the Later Stone Age, characterised by microlithic technology, symbolic behaviour, and rock art. Finally, we concluded with the transition to food production, considering environmental influences and archaeological evidence for domestication. By completing this Series, you should now be able to describe the Lower Stone Age, explain Middle Stone Age innovations, analyse Later Stone Age cultural expressions, and assess the significance of the shift to food production, as outlined in the Series Learning Outcomes.

Glossary Of Terms

- **Acheulean hand axes:** Large bifacial stone tools characteristic of the Lower Stone Age.
- **Domestication:** The process of taming plants and animals for human use.



- **Hominins:** Ancient human ancestors and related species.
- **Later Stone Age (LSA):** Period marked by microlithic tools, symbolic behaviour, and rock art.
- **Lower Stone Age (LSA):** Earliest phase of human technology, characterised by crude stone tools.
- **Microlithic technology:** Production of small, finely worked stone tools often used in composite implements.
- **Middle Stone Age (MSA):** Period marked by refined stone tools, pigments, and organised settlement strategies.
- **Rock art:** Engravings and paintings on rock surfaces depicting animals, humans, and symbolic motifs.
- **Subsistence strategies:** Methods used by communities to obtain food, such as hunting, gathering, and fishing.



Concept Check Questions 3

Objective questions

1. The Lower Stone Age is marked by the use of simple _____ tools. (Linked to SLO 3.1)
2. Acheulean _____ are characteristic artefacts of the Lower Stone Age. (Linked to SLO 3.1)
3. The Middle Stone Age is characterised by more advanced stone tools such as blades and _____. (Linked to SLO 3.2)
4. Later Stone Age microlithic tools were often mounted on _____ or bone. (Linked to SLO 3.3)
5. Rock art provides evidence of symbolic thought and _____ communication. (Linked to SLO 3.4)

Short-answer questions

6. Define hominins. (Linked to SLO 3.1)
7. Mention one cultural practice associated with the Middle Stone Age. (Linked to SLO 3.2)
8. What is microlithic technology? (Linked to SLO 3.3)
9. Name one example of rock art subject matter. (Linked to SLO 3.4)
10. Mention one crop cultivated during early domestication in West Africa. (Linked to SLO 3.5)

Long-answer questions

11. Describe the characteristics of the Lower Stone Age in West Africa and the Sahara. (Linked to SLO 3.1)
12. Explain technological innovations and cultural practices of the Middle Stone Age. (Linked to SLO 3.2)
13. Analyse microlithic technology and symbolic behaviour in the Later Stone Age. (Linked to SLO 3.3)



14. Evaluate the significance of rock art and cultural expressions in the Later Stone Age.
(Linked to SLO 3.4)

15. Assess the transition from the Stone Age to food production, with reference to environmental influences and archaeological evidence. (Linked to SLO 3.5)

Answers To Concept Check Questions 3

Objective questions

1. Stone
2. Hand axes
3. Points
4. Wood
5. Social

Short-answer questions

6. Ancient human ancestors and related species.
7. Use of pigments for symbolic purposes.
8. Production of small, finely worked stone tools.
9. Animals or hunting scenes.
10. Sorghum or millet.

Long-answer questions

11. **Basic response:** The Lower Stone Age was characterised by crude tools and early hominin presence. **Value-added response:** It shows the beginnings of human adaptation and survival strategies in diverse environments.

12. **Basic response:** The Middle Stone Age featured blades, points, and pigments. **Value-added response:** It also reflects growing social organisation and settlement near resource-rich areas.



13. **Basic response:** Microlithic tools were small and finely worked, used in composite implements. **Value-added response:** Symbolic behaviour included ornaments and beads, showing advanced cognitive abilities.
14. **Basic response:** Rock art depicted animals and hunting scenes. **Value-added response:** It provides evidence of symbolic thought, cultural identity, and prehistoric communication.
15. **Basic response:** Environmental changes encouraged plant cultivation and animal domestication. **Value-added response:** The transition enabled permanent settlements and the rise of complex societies.

Answers To Pilot Questions 3

Part 3.1

1. The earliest phase of human technology.
2. Hand axes.
3. Nigeria.
4. They show technological skill and adaptation.
5. They provide evidence of early human occupation.

Part 3.2

1. Advanced stone tools and cultural practices.
2. Blades.
3. Use of pigments.
4. For access to food and water.
5. Hunting, gathering, and fishing.

Part 3.3

1. Production of small, finely worked tools.



2. Arrows or spears.
3. Ornaments or beads.
4. Engravings and paintings on rock surfaces.
5. It reveals symbolic thought and cultural expression.

Part 3.4

1. Environmental changes.
2. Fertile soils and abundant water.
3. Sorghum or millet.
4. Cattle or goats.
5. It enabled permanent settlements and complex societies.



References And Attributions 3

- **Figures and Boxes suggested in Series 3:**
 - Figure 3.1 Lower Stone Age tools in West Africa and the Sahara
 - Box 3.2 Key Lower Stone Age sites in West Africa and the Sahara
 - Figure 3.3 Middle Stone Age tools in West Africa and the Sahara
 - Box 3.4 Settlement patterns and subsistence strategies in the Middle Stone Age
 - Figure 3.5 Microlithic technology in the Later Stone Age
 - Plate 3.6 Rock art in the Later Stone Age Sahara
 - Figure 3.7 Environmental influences on the transition to food production
 - Box 3.8 Archaeological evidence for early domestication in West Africa and the Sahara
- **AI prompt suggestions used for illustration placeholders:**
 - Diagrams showing Lower, Middle, and Later Stone Age tools.
 - Plates showing rock art.
 - Boxes summarising sites, settlement strategies, and domestication evidence.
- **Open Educational Resource (OER) search strings suggested:**
 - “Lower Stone Age tools West Africa Sahara OER”
 - “Lower Stone Age sites West Africa Sahara OER”
 - “Middle Stone Age tools West Africa Sahara OER”
 - “Middle Stone Age settlement subsistence West Africa Sahara OER”
 - “Later Stone Age microlithic tools West Africa Sahara OER”
 - “Later Stone Age Sahara rock art OER”
 - “West Africa Sahara environmental changes food production OER”



- “West Africa Sahara early domestication archaeology OER”

- **General references (APA style):**

- Connah, G. (2004). *African archaeology: A critical introduction*. Cambridge University Press.
- McIntosh, S. K. (1999). *Beyond chiefdoms: Pathways to complexity in Africa*. Cambridge University Press.
- Shaw, T. (1978). *Nigeria: Its archaeology and early history*. Thames and Hudson.
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ARC302 Series 4 Food Production and Metallurgy in West Africa and the Sahara

- **Part 4.1 Origins of food production in West Africa and the Sahara**

- 4.1.1 Environmental and cultural factors
- 4.1.2 Early crops and domesticated animals

- **Part 4.2 Development of farming communities**

- 4.2.1 Settlement patterns and social organisation
- 4.2.2 Archaeological evidence of farming practices

- **Part 4.3 Emergence of metallurgy in West Africa and the Sahara**

- 4.3.1 Early iron-working traditions
- 4.3.2 Centres of metallurgical innovation

- **Part 4.4 Impact of food production and metallurgy on society**

- 4.4.1 Economic and cultural transformations
- 4.4.2 Long-term significance for West African civilisations

Introduction

In the last Series, we explored Stone Age sequences in West Africa and the Sahara, tracing the technological and cultural developments that shaped early human societies. Building on that foundation, this Series turns to the beginnings of food production and metallurgy, two transformative processes that changed the course of history in the region. These developments mark the transition from foraging to farming and from stone tools to iron technology, laying the groundwork for complex societies.

The aim of this Series is to explain how food production and metallurgy emerged in West Africa and the Sahara, and to evaluate their impact on settlement, economy, and culture.

We shall commence this Series by examining the origins of food production, focusing on environmental and cultural factors as well as early crops and domesticated animals. Next, we



will move on to the development of farming communities, considering settlement patterns and archaeological evidence of farming practices. Afterwards, we will continue with the emergence of metallurgy, highlighting early iron-working traditions and centres of innovation. Finally, we will conclude with the impact of food production and metallurgy, assessing their economic, cultural, and long-term significance for West African civilisations.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- **SLO 4.1** explain the environmental and cultural factors that influenced the origins of food production in West Africa and the Sahara,
- **SLO 4.2** identify early crops and domesticated animals in the region,
- **SLO 4.3** describe settlement patterns and social organisation of early farming communities,
- **SLO 4.4** evaluate archaeological evidence of farming practices in West Africa and the Sahara,
- **SLO 4.5** analyse the emergence of metallurgy and early iron-working traditions,
- **SLO 4.6** identify centres of metallurgical innovation in West Africa and the Sahara, and
- **SLO 4.7** assess the economic, cultural, and long-term significance of food production and metallurgy for West African civilisations.

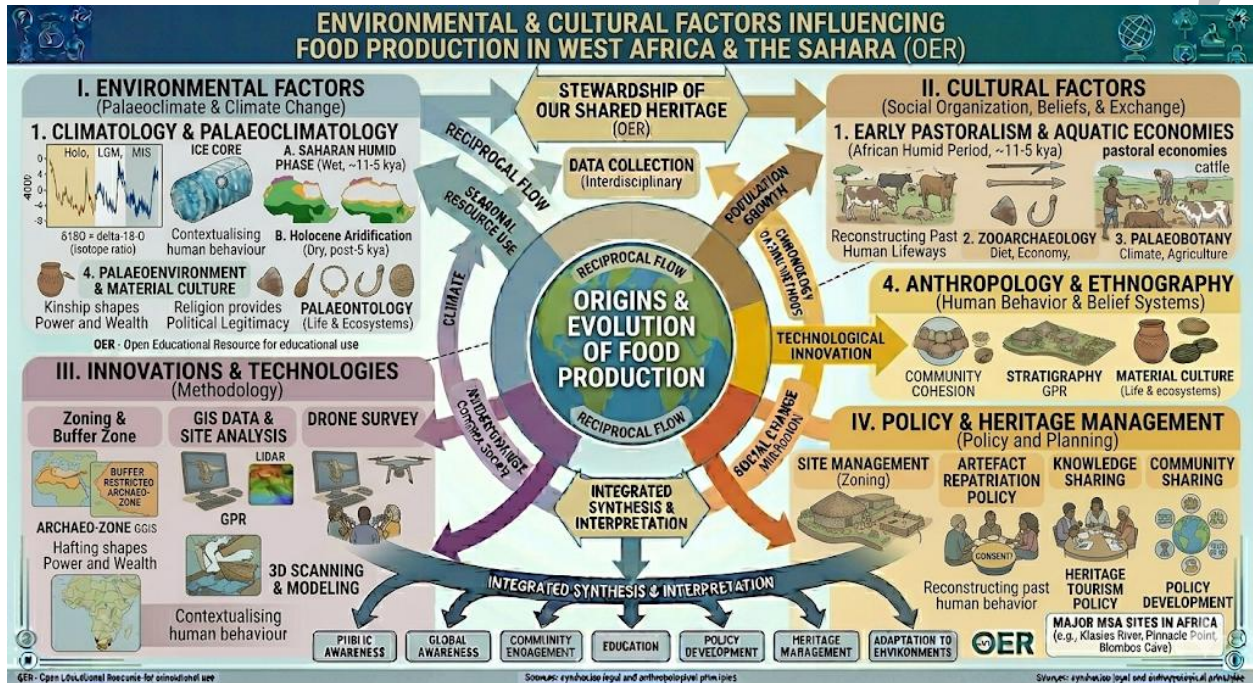
4.1 Origins of Food Production in West Africa and the Sahara

4.1.1 Environmental and cultural factors

The beginnings of **food production** in West Africa and the Sahara were shaped by both environmental and cultural influences. Environmental changes, such as shifts in rainfall and vegetation, created opportunities for experimentation with plant cultivation. Fertile soils and seasonal rivers provided favourable conditions for early farming.



Cultural factors also played a role, as communities began to develop knowledge of plants and animals through observation and trial. These practices gradually evolved into systematic cultivation and herding, marking a turning point in human adaptation.



Short description: Diagram showing environmental and cultural factors influencing the origins of food production.

Caption: **Figure 4.1 Environmental and cultural factors in the origins of food production**

Fill in the blank: Fertile soils and seasonal _____ provided favourable conditions for early farming.

4.1.2 Early crops and domesticated animals

Archaeological evidence shows that early communities in West Africa and the Sahara cultivated crops such as **sorghum** and **millet**, which became staple foods. These crops were well adapted to the region's climate and provided reliable sources of nutrition.



Domestication of animals also began during this period. Cattle, goats, and sheep were among the earliest domesticated species, offering meat, milk, and hides. The combination of crop cultivation and animal domestication laid the foundation for farming communities and more permanent settlements.

Box 4.2 Early crops and domesticated animals in West Africa and the Sahara

Category	Specific Species	Key Archaeological Insights
Cereals	Pearl Millet (<i>Pennisetum glaucum</i>)	The first indigenous crop domesticated in the Sahel (c. 2500 BC). It is highly drought-tolerant.
Cereals	Sorghum (<i>Sorghum bicolor</i>)	Domesticated later than millet, favoring the heavier soils of the savanna and Lake Chad basin.
Livestock	Cattle (<i>Bos taurus/indicus</i>)	Domesticated in the Sahara/North Africa as early as 7000 BC; provided milk, blood, and mobile wealth.
Livestock	Goats & Sheep	Introduced from the Near East/Northeast Africa; essential for their hardiness in arid environments.
Tubers	African Yam (<i>Dioscorea</i> spp.)	Developed in the "forest-savanna mosaic"; led to high population densities in West African forest zones.

Fill in the blank: Early communities cultivated sorghum and millet, and domesticated cattle, goats, and _____.

Pilot questions 4.1



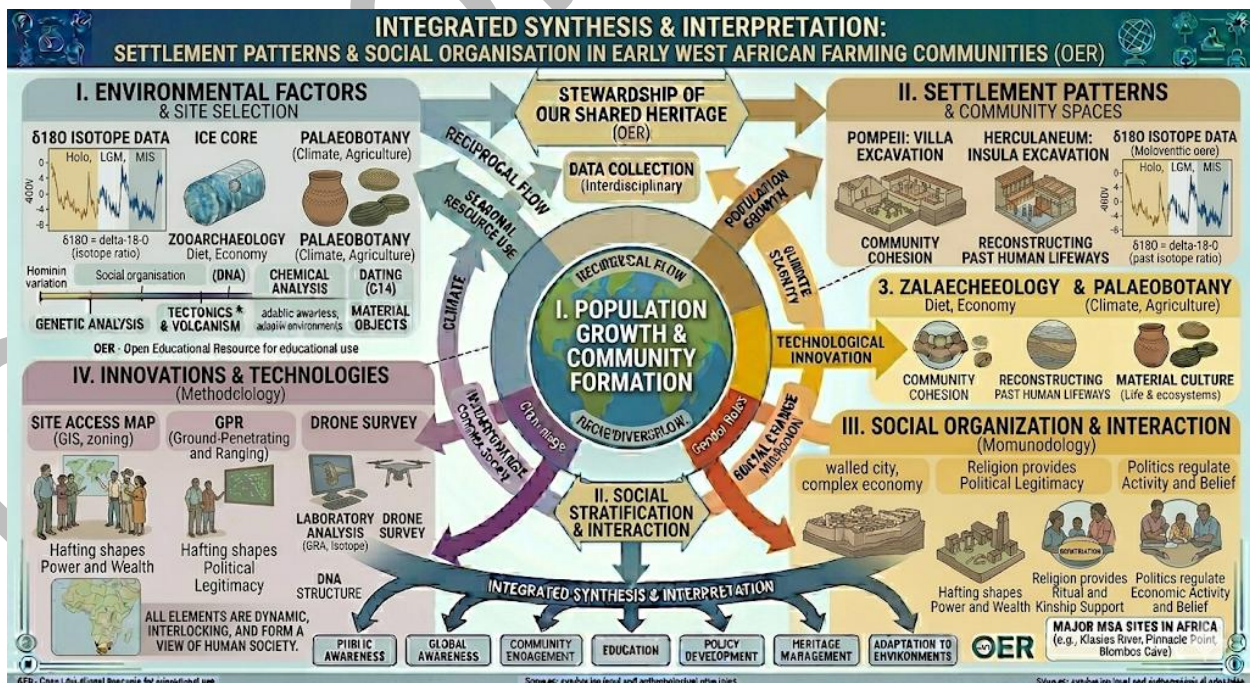
1. What factors influenced the origins of food production in West Africa and the Sahara?
2. Mention one environmental factor that encouraged farming.
3. Name one crop cultivated during early food production.
4. Name one animal domesticated during this period.
5. Why was the combination of crop cultivation and animal domestication important?

4.2 Development of Farming Communities

4.2.1 Settlement patterns and social organisation

The rise of **farming communities** in West Africa and the Sahara marked a significant shift from mobile lifestyles to more permanent settlements. People began to establish villages near fertile land and water sources, ensuring access to crops and livestock. These settlements often grew into clusters of households, reflecting the beginnings of organised social structures.

Social organisation also became more complex. Farming required cooperation, division of labour, and shared responsibilities. Communities developed leadership roles and systems of resource management, laying the groundwork for more advanced societies.



Short description: Diagram showing settlement patterns and social organisation in early farming communities.

Caption: **Figure 4.3 Settlement patterns and social organisation in farming communities**

Fill in the blank: Farming communities often settled near fertile land and _____ sources.

4.2.2 Archaeological evidence of farming practices

Archaeologists have uncovered **evidence of farming practices** through remains of storage pits, grinding stones, and agricultural tools. These finds demonstrate how communities processed crops such as sorghum and millet, and stored surplus food for future use.

Evidence of animal pens and faunal remains also shows that livestock were kept close to settlements, reinforcing the importance of mixed farming systems. Together, these discoveries highlight the practical strategies that sustained early farming communities in West Africa and the Sahara.

Box 4.4 Archaeological evidence of farming practices in West Africa and the Sahara

Evidence Category	Archaeological Find	Functional Insight
Storage Infrastructure	Storage Pits & Granary Bases	Surplus Management: Indicates a shift from "immediate return" to "delayed return" economies, allowing survival through the dry season.
Processing Tools	Grinding Stones (Querns & Mullers)	Food Preparation: Essential for dehusking and flouring hard grains like Pearl Millet and Sorghum.



Evidence Category	Archaeological Find	Functional Insight
Cultivation Tools	Polished Stone Axes & Hoes	Land Clearance: Used for "slash-and-burn" agriculture and tilling the soil in savanna and forest-edge zones.
Livestock Features	Animal Pens & Enclosures	Husbandry: Stone or post-hole alignments that indicate the corralling of cattle, sheep, or goats.

Fill in the blank: Archaeological evidence of farming includes storage pits, grinding stones, and _____ tools.

Pilot questions 4.2

1. Why did farming communities settle near fertile land and water sources?
2. Mention one feature of social organisation in early farming communities.
3. Name one type of archaeological evidence of farming practices.
4. Which crops were commonly processed using grinding stones?
5. Why is archaeological evidence important for understanding farming communities?

4.3 Emergence of Metallurgy in West Africa and the Sahara

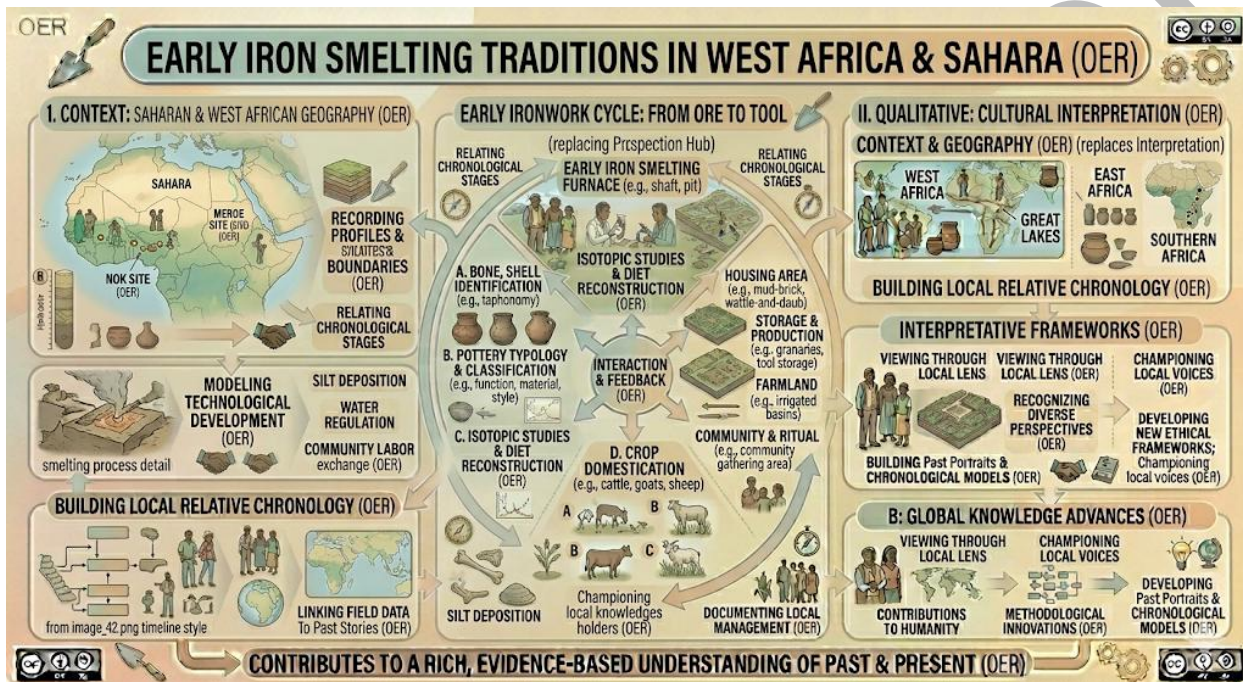
4.3.1 Early iron-working traditions

The **emergence of metallurgy** in West Africa and the Sahara represents a major technological breakthrough. **Metallurgy** refers to the science and practice of extracting metals from ores and



shaping them into tools and objects. Early iron-working traditions in the region date back to the first millennium BCE, with evidence of furnaces, slag, and iron artefacts.

Iron tools such as hoes, knives, and spearheads replaced stone implements, greatly improving farming, hunting, and warfare. The mastery of iron smelting required specialised knowledge, including control of high temperatures and the use of bellows to intensify heat.



Short description: Diagram showing an early iron smelting furnace and iron tools.

Caption: **Figure 4.5 Early iron-working traditions in West Africa and the Sahara**

Fill in the blank: Metallurgy refers to the science and practice of extracting metals from _____ and shaping them into tools.

4.3.2 Centres of metallurgical innovation

Several regions in West Africa became renowned centres of **metallurgical innovation**. The Nok culture of Nigeria is famous for its early iron-working and terracotta art, while sites in Niger and



Mali also provide evidence of advanced smelting techniques. These centres not only produced tools but also influenced trade and cultural exchange across the Sahara.

The spread of iron technology transformed societies, enabling more efficient agriculture and stronger military capabilities. Metallurgical centres became hubs of innovation, contributing to the rise of complex civilisations in West Africa.

Box 4.6 Centres of metallurgical innovation in West Africa and the Sahara

Centre of Innovation	Primary Metal	Key Archaeological Evidence
Nok Culture (Nigeria)	Iron	Evidence of iron smelting furnaces and slag dating back to 1000 BC ; associated with famous terracotta sculptures.
Termit & Agadez (Niger)	Copper & Iron	Some of the oldest copper working in Africa (c. 2000 BC) and early iron evidence (c. 1500 BC).
Middle Niger & Mema (Mali)	Iron	Massive slag mounds at sites like Ounjougou and Jenné-jeno indicating industrial-scale production.
Akjoujt (Mauritania)	Copper	Early copper mines and smelting sites (c. 800 BC) showing specialized extraction techniques.

Fill in the blank: The Nok culture of _____ is famous for its early iron-working and terracotta art.

Pilot questions 4.3

1. What does metallurgy refer to?



2. Mention one type of iron tool produced in early traditions.
3. Name one centre of metallurgical innovation in West Africa.
4. Why was iron technology significant for agriculture?
5. How did metallurgical centres contribute to cultural exchange?

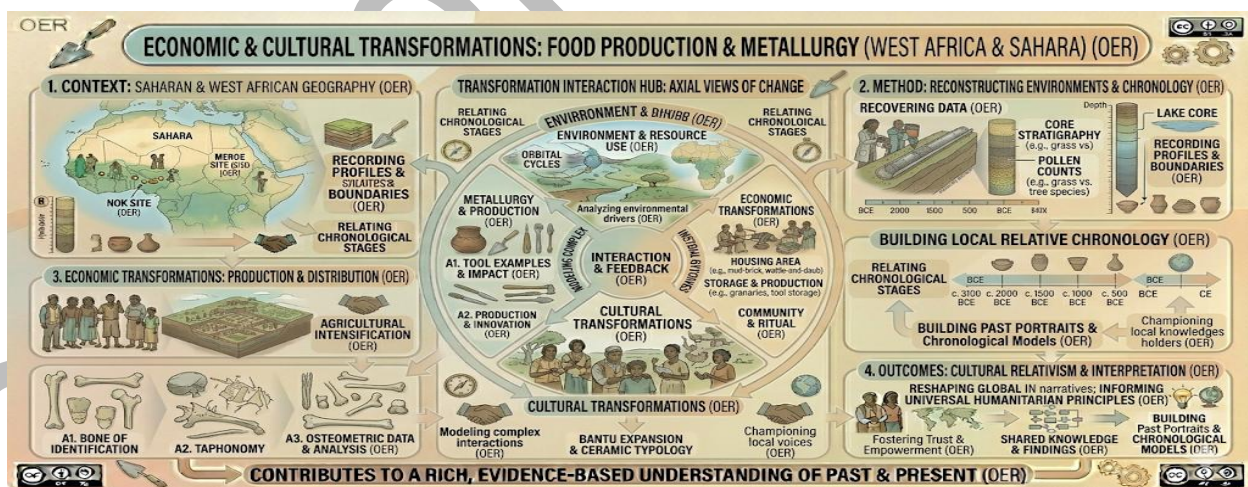
4.4 Impact of Food Production and Metallurgy on Society

4.4.1 Economic and cultural transformations

The introduction of **food production** and **metallurgy** brought profound changes to the economic and cultural life of West Africa and the Sahara. Farming and herding created surplus food, which supported population growth and allowed communities to specialise in other activities.

Metallurgy, particularly iron-working, enhanced agricultural productivity and enabled the development of stronger tools and weapons.

Culturally, these innovations fostered trade networks, as surplus goods and iron products were exchanged across regions. They also encouraged new forms of social organisation, with leadership roles emerging to manage resources and coordinate trade.



Short description: Diagram showing economic and cultural transformations due to food production and metallurgy.

Caption: **Figure 4.7 Economic and cultural transformations in West Africa and the Sahara**



Fill in the blank: Surplus food supported population growth and allowed communities to _____ in other activities.

4.4.2 Long-term significance for West African civilisations

The long-term significance of food production and metallurgy lies in their role as foundations for **civilisation**. Permanent settlements grew into towns and eventually into complex societies. Metallurgical centres became hubs of innovation, influencing political power and cultural identity.

These developments also shaped West Africa's place in wider history. Agricultural surpluses and iron technology supported trade across the Sahara, linking the region to North Africa and beyond. The combination of food production and metallurgy thus provided the basis for enduring civilisations such as Nok, Mali, and others that followed.

Box 4.8 Long-term significance of food production and metallurgy

Innovation	Societal Transformation	Long-term Historical Impact
Food Production	Transition from mobile foraging to Sedentism (permanent villages).	Demographic Boom: Reliable harvests led to population growth, providing the manpower needed for state-building and massive infrastructure.
Metallurgy	The shift from stone to Iron and Copper technology.	Environmental Mastery: Iron tools allowed for more efficient land clearing (deforestation for farming) and higher-yield agriculture.



Innovation	Societal Transformation	Long-term Historical Impact
Combined Force	Emergence of Specialization and social hierarchy.	Urbanization: Surplus food and metal wealth fueled the rise of the first West African cities (e.g., Jenné-jeno and the Nok towns).

Fill in the blank: Agricultural surpluses and iron technology supported _____ across the Sahara.

Pilot questions 4.4

1. How did food production and metallurgy transform economies?
2. Mention one cultural impact of these innovations.
3. Why are food production and metallurgy considered foundations of civilisation?
4. Name one civilisation influenced by these developments.
5. How did trade networks link West Africa to wider regions?

Series Summary

This Series examined the origins and development of food production and metallurgy in West Africa and the Sahara, highlighting their importance as foundations for civilisation. Its purpose was to show how environmental and cultural factors encouraged farming, how communities organised themselves around agriculture, and how metallurgy transformed societies. These themes are central to understanding the transition from subsistence living to complex social and economic systems.

We began with the origins of food production, focusing on environmental influences and the cultivation of early crops alongside domesticated animals. Then we explored the development of farming communities, considering settlement patterns, social organisation, and archaeological evidence of farming practices. Afterwards, we studied the emergence of metallurgy, looking at



early iron-working traditions and centres of innovation such as Nok. Finally, we assessed the impact of food production and metallurgy, noting their economic, cultural, and long-term significance for West African civilisations. By completing this Series, you should now be able to explain the origins of food production, identify crops and animals, describe farming communities, analyse metallurgy, and evaluate its transformative impact, as outlined in the Series Learning Outcomes.

Glossary Of Terms

- **Agricultural surplus:** Extra food produced beyond immediate consumption needs, often stored or traded.
- **Domestication:** The process of taming plants and animals for human use.
- **Farming communities:** Groups of people living in permanent settlements based on agriculture and herding.
- **Metallurgy:** The science and practice of extracting metals from ores and shaping them into tools and objects.
- **Nok culture:** An early West African civilisation in Nigeria known for iron-working and terracotta art.
- **Sorghum:** A cereal crop cultivated in early West African farming communities.
- **Terracotta:** Fired clay used for sculpture and art, often associated with Nok culture.



Concept Check Questions 4

Objective questions

1. Fertile soils and seasonal _____ encouraged early farming. (Linked to SLO 4.1)
2. Early communities cultivated sorghum and _____. (Linked to SLO 4.2)
3. Farming communities often settled near fertile land and _____ sources. (Linked to SLO 4.3)
4. Metallurgy refers to extracting metals from _____. (Linked to SLO 4.5)
5. The Nok culture of _____ is famous for iron-working and terracotta art. (Linked to SLO 4.6)

Short-answer questions

6. Define domestication. (Linked to SLO 4.2)
7. Mention one feature of social organisation in farming communities. (Linked to SLO 4.3)
8. Name one type of archaeological evidence of farming practices. (Linked to SLO 4.4)
9. Mention one iron tool produced in early traditions. (Linked to SLO 4.5)
10. Why are food production and metallurgy considered foundations of civilisation? (Linked to SLO 4.7)

Long-answer questions

11. Explain the environmental and cultural factors that influenced the origins of food production. (Linked to SLO 4.1)
12. Identify early crops and domesticated animals in West Africa and the Sahara. (Linked to SLO 4.2)
13. Describe settlement patterns and social organisation of farming communities. (Linked to SLO 4.3)
14. Evaluate archaeological evidence of farming practices in West Africa and the Sahara. (Linked to SLO 4.4)



15. Analyse the emergence of metallurgy and early iron-working traditions. (Linked to SLO 4.5)
16. Identify centres of metallurgical innovation in West Africa and the Sahara. (Linked to SLO 4.6)
17. Assess the economic, cultural, and long-term significance of food production and metallurgy. (Linked to SLO 4.7)

Answers To Concept Check Questions 4

Objective questions

1. Rivers
2. Millet
3. Water
4. Ores
5. Nigeria

Short-answer questions

6. The process of taming plants and animals for human use.
7. Division of labour or leadership roles.
8. Storage pits or grinding stones.
9. Hoes or knives.
10. They enabled permanent settlements, trade, and complex societies.

Long-answer questions

11. **Basic response:** Environmental changes and cultural knowledge encouraged farming.
Value-added response: Fertile soils, rainfall patterns, and experimentation with plants and animals shaped early food production.



12. **Basic response:** Sorghum, millet, cattle, goats, and sheep. **Value-added response:**
These provided reliable nutrition and resources, supporting permanent settlements.
13. **Basic response:** Communities settled near fertile land and water, with organised households. **Value-added response:** Social organisation included cooperation, leadership, and resource management.
14. **Basic response:** Evidence includes storage pits, grinding stones, and animal pens. **Value-added response:** These finds show how communities processed crops, stored surplus, and managed livestock.
15. **Basic response:** Iron tools replaced stone implements. **Value-added response:** Iron smelting required specialised knowledge and transformed farming, hunting, and warfare.
16. **Basic response:** Centres included Nok (Nigeria), Niger, and Mali. **Value-added response:** These centres influenced trade, cultural exchange, and innovation.
17. **Basic response:** Food production and metallurgy supported population growth and trade. **Value-added response:** They laid the foundations for civilisations, linking West Africa to wider networks.

Answers To Pilot Questions 4

Part 4.1

1. Environmental and cultural factors.
2. Fertile soils and seasonal rivers.
3. Sorghum.
4. Cattle.
5. It supported permanent settlements.

Part 4.2

1. For access to crops and livestock.
2. Division of labour.



3. Grinding stones.
4. Sorghum or millet.
5. It helps reconstruct farming practices.

Part 4.3

1. Extracting metals from ores.
2. Hoes.
3. Nok (Nigeria).
4. It improved productivity.
5. By spreading tools and ideas.

Part 4.4

1. They created surplus food and stronger tools.
2. Trade networks.
3. They enabled permanent settlements and complex societies.
4. Nok or Mali.
5. By linking West Africa to North Africa and beyond.



References And Attributions 4

- **Figures and Boxes suggested in Series 4:**

- Figure 4.1 Environmental and cultural factors in the origins of food production
- Box 4.2 Early crops and domesticated animals in West Africa and the Sahara
- Figure 4.3 Settlement patterns and social organisation in farming communities
- Box 4.4 Archaeological evidence of farming practices in West Africa and the Sahara
- Figure 4.5 Early iron-working traditions in West Africa and the Sahara
- Box 4.6 Centres of metallurgical innovation in West Africa and the Sahara
- Figure 4.7 Economic and cultural transformations in West Africa and the Sahara
- Box 4.8 Long-term significance of food production and metallurgy

- **AI prompt suggestions used for illustration placeholders:**

- Diagrams showing environmental factors, settlement patterns, iron smelting, and transformations.
- Boxes summarising crops, animals, farming evidence, metallurgical centres, and long-term impacts.

- **Open Educational Resource (OER) search strings suggested:**

- “West Africa Sahara origins of food production environmental cultural factors OER”
- “West Africa Sahara early crops domesticated animals OER”
- “West Africa Sahara farming communities settlement social organisation OER”
- “West Africa Sahara archaeological evidence farming practices OER”
- “West Africa Sahara early iron smelting traditions OER”
- “West Africa Sahara centres of metallurgical innovation OER”



- “West Africa Sahara food production metallurgy economic cultural transformations OER”
- “West Africa Sahara food production metallurgy long-term significance OER”

- **General references (APA style):**

- Connah, G. (2004). *African archaeology: A critical introduction*. Cambridge University Press.
- Holl, A. F. C. (2009). *Early pastoral societies in West Africa*. Journal of African Archaeology.
- McIntosh, S. K. (1999). *Beyond chiefdoms: Pathways to complexity in Africa*. Cambridge University Press.
- Shaw, T. (1978). *Nigeria: Its archaeology and early history*. Thames and Hudson.



ARC302 Series 5 Complex Societies, Trade, and Heritage in West Africa

- **Part 5.1 Emergence of complex societies in West Africa**
 - 5.1.1 Characteristics of complex societies
 - 5.1.2 Archaeological evidence of early complexity
- **Part 5.2 Trade networks and economic systems**
 - 5.2.1 Local and regional trade
 - 5.2.2 Trans-Saharan trade connections
- **Part 5.3 Cultural heritage and identity**
 - 5.3.1 Material culture and traditions
 - 5.3.2 Oral traditions and historical memory
- **Part 5.4 Preservation and contemporary relevance of heritage**
 - 5.4.1 Challenges of heritage preservation
 - 5.4.2 Heritage and modern identity in West Africa

Introduction

In the last Series, we examined how food production and metallurgy transformed West African societies, laying the foundations for permanent settlements and technological innovation. Building on that, this Series explores the rise of complex societies, the development of trade networks, and the enduring significance of cultural heritage. These themes are crucial for understanding how West Africa became integrated into wider historical processes and how its traditions continue to shape identity today.

The aim of this Series is to analyse the emergence of complex societies, evaluate the role of trade in economic development, and assess the importance of cultural heritage and its preservation in West Africa.



We shall commence this Series by studying the emergence of complex societies, focusing on their defining characteristics and archaeological evidence. Next, we will move on to trade networks and economic systems, considering both local exchanges and trans-Saharan connections. Afterwards, we will explore cultural heritage and identity, looking at material culture, traditions, and oral histories. Finally, we will conclude with the preservation and contemporary relevance of heritage, assessing challenges and its role in modern identity.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- **SLO 5.1** define the characteristics of complex societies in West Africa,
- **SLO 5.2** explain archaeological evidence that demonstrates early social complexity,
- **SLO 5.3** analyse local and regional trade systems in West Africa,
- **SLO 5.4** evaluate the significance of trans-Saharan trade connections,
- **SLO 5.5** describe material culture and traditions as expressions of heritage,
- **SLO 5.6** explain the role of oral traditions in preserving historical memory,
- **SLO 5.7** assess challenges of heritage preservation in West Africa, and
- **SLO 5.8** evaluate the relevance of heritage for modern identity in West Africa.

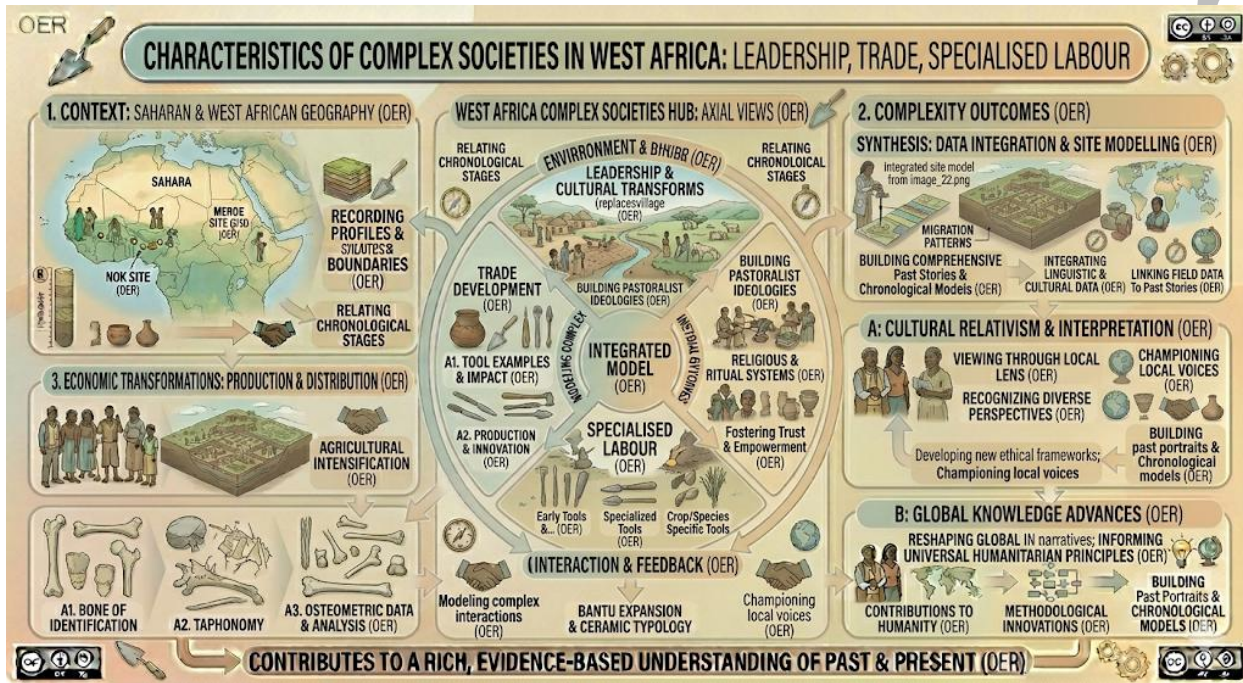
5.1 Emergence of Complex Societies in West Africa

5.1.1 Characteristics of complex societies

A **complex society** refers to a community with advanced social, political, and economic organisation. In West Africa, such societies were marked by permanent settlements, specialised labour, leadership structures, and systems of trade. These features distinguished them from earlier farming communities, which were smaller and less stratified.



Complex societies also displayed cultural sophistication, including religious practices, artistic traditions, and the construction of monumental architecture. These elements reveal how communities moved beyond subsistence living to create enduring civilisations.



Short description: Diagram showing characteristics of complex societies such as leadership, trade, and specialised labour.

Caption: **Figure 5.1 Characteristics of complex societies in West Africa**

Fill in the blank: Complex societies are marked by permanent settlements, specialised labour, and _____ structures.

5.1.2 Archaeological evidence of early complexity

Archaeologists identify complex societies through material remains such as **monumental architecture**, **specialised tools**, and evidence of long-distance trade. Sites in Nigeria, Mali, and Ghana reveal traces of organised settlements, craft production, and social hierarchy.



For example, the Nok culture in Nigeria is known for its terracotta sculptures, which reflect artistic skill and symbolic meaning. Similarly, evidence of trade in beads, metals, and ceramics demonstrates economic networks that connected communities across West Africa.

Box 5.2 Archaeological evidence of early complexity in West Africa

Evidence Type	Key Representative	Social Implication
Artistic Mastery	Nok Terracottas (Nigeria)	Specialization: High-quality sculpture requires full-time artisans supported by a food surplus and a shared religious/political ideology.
Monumental Architecture	Dhar Tichitt & Sukur	Collective Labor: Construction of stone masonry and defensive walls indicates a centralized authority or strong communal coordination.
Trade Artefacts	Beads, Copper, & Exotic Stone	Economic Hierarchy: The presence of non-local "prestige goods" suggests elite classes with the power to control long-distance exchange.

Fill in the blank: The Nok culture of Nigeria is known for its symbolic _____ sculptures.

Pilot questions 5.1

1. What is a complex society?
2. Mention one characteristic of complex societies in West Africa.
3. Name one type of archaeological evidence of early complexity.
4. What is the Nok culture famous for?



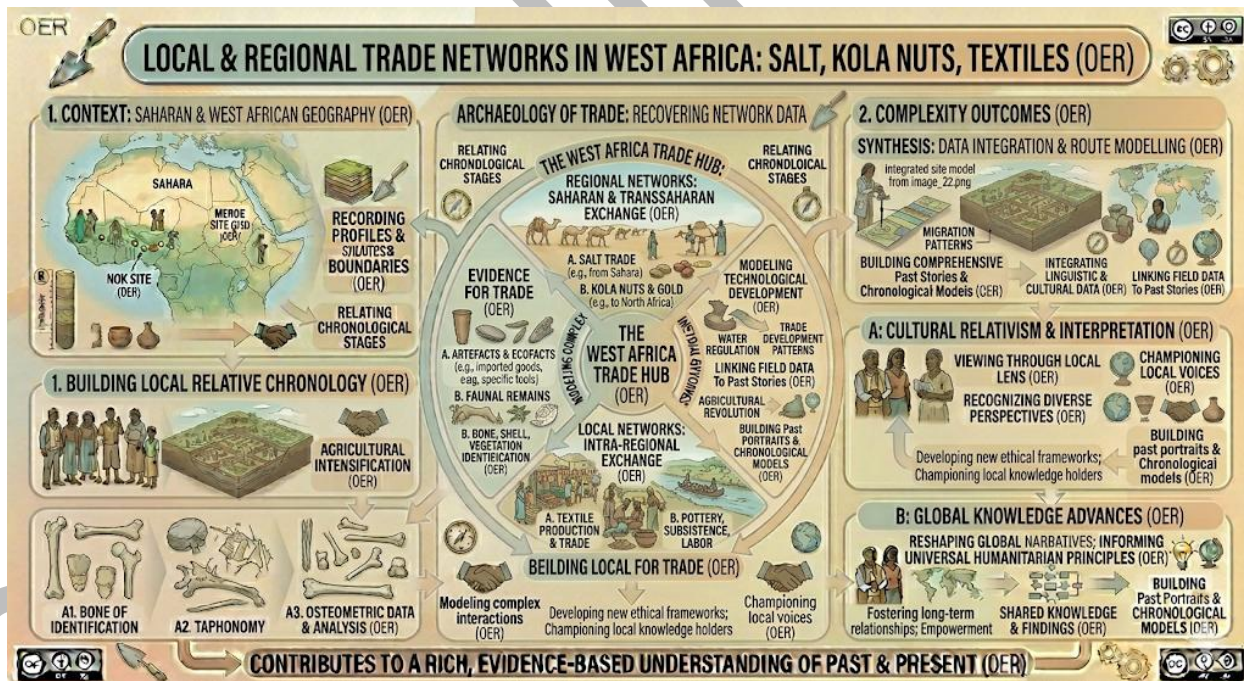
5. Why is trade evidence important for identifying complex societies?

5.2 Trade Networks and Economic Systems

5.2.1 Local and regional trade

Trade within West Africa began at the local level, where communities exchanged goods such as food, pottery, and tools. These exchanges strengthened social ties and ensured that resources were distributed across different ecological zones. **Regional trade** developed as communities specialised in certain products, such as salt, kola nuts, or textiles, and exchanged them with neighbouring groups.

This system of trade encouraged cooperation and interdependence, laying the foundation for larger economic networks. Archaeological evidence of beads, ceramics, and other artefacts shows how goods moved across regions, linking diverse communities.



Short description: Diagram showing local and regional trade networks in West Africa.

Caption: **Figure 5.3 Local and regional trade networks in West Africa**



Fill in the blank: Regional trade developed as communities specialised in certain products such as salt and _____ nuts.

5.2.2 Trans-Saharan trade connections

The **trans-Saharan trade** connected West Africa to North Africa and beyond, creating one of the most significant economic systems in world history. Caravans transported gold, salt, and slaves across the desert, while returning with goods such as horses, textiles, and Islamic manuscripts.

This trade was not only economic but also cultural, as it facilitated the spread of religion, ideas, and technologies. Cities such as Timbuktu and Gao became centres of commerce and learning, reflecting the importance of trans-Saharan connections in shaping West African civilisation.

Box 5.4 Key features of trans-Saharan trade

Feature	Description	Long-term Significance
The Camel	Introduced to the Sahara by the 3rd–4th century AD.	The "Ship of the Desert": Enabled large-scale, reliable transport across the arid "Sand Sea."
Trade Routes	North-South corridors connecting cities like Sijilmasa to Timbuktu and Gao.	Urbanization: Led to the rise of "port cities" on the edges of the desert.
The "Silent Trade"	Legend of indirect exchange between North African and West African merchants.	Economic Trust: Highlighted the sophisticated systems of weight, measure, and credit used.



Fill in the blank: The trans-Saharan trade connected West Africa to _____ Africa and beyond.

Pilot questions 5.2

1. What goods were exchanged in local trade networks?
2. Mention one product commonly traded regionally.
3. Name two goods transported across the Sahara.
4. Why was trans-Saharan trade culturally significant?
5. Which West African city became a centre of commerce and learning?

5.3 Cultural Heritage and Identity

5.3.1 Material culture and traditions

Material culture refers to the physical objects, artefacts, and structures created by a society, which reflect its values, beliefs, and way of life. In West Africa, material culture includes pottery, textiles, sculptures, and architectural remains. These items not only served practical purposes but also expressed identity, artistry, and social status.

Traditions such as festivals, rituals, and craft practices are also part of cultural heritage. They provide continuity between past and present, reinforcing community bonds and transmitting values across generations.





Short description: Diagram showing examples of West African material culture such as pottery, textiles, and sculptures.

Caption: **Figure 5.5 Material culture and traditions in West Africa**

Fill in the blank: Material culture refers to the physical objects and _____ created by a society.

5.3.2 Oral traditions and historical memory

Oral traditions are spoken accounts, stories, and songs passed down through generations. They serve as a vital means of preserving **historical memory**, especially in societies where writing was not widely used. In West Africa, oral traditions include epic tales, genealogies, and proverbs, which convey history, moral lessons, and cultural identity.

These traditions are often performed by griots or storytellers, who act as custodians of collective memory. Oral traditions remain significant today, offering insights into the past and shaping modern identity.



Box 5.6 Oral traditions and historical memory in West Africa

Element	Function	Archaeological/Historical Link
Griots (Jeliw)	Professional historians, musicians, and advisors.	The "Living Archive": They maintain the "official" history of lineages and states (e.g., the Mali Empire).
Epic Tales	Narrative poems detailing the lives of culture heroes.	Nation Building: Tales like the <i>Epic of Sundiata</i> explain the origins of laws and social structures.
Genealogies	Recitation of ancestral lineages.	Legitimacy: Used to settle land disputes and validate the right to rule.
Proverbs	Short, pithy sayings containing moral or tactical wisdom.	Social Philosophy: Provide insight into the ethical and intellectual frameworks of ancient societies.

Fill in the blank: Oral traditions are spoken accounts passed down through generations to preserve _____ memory.

Pilot questions 5.3

1. What is material culture?
2. Mention one example of West African material culture.
3. What are oral traditions?



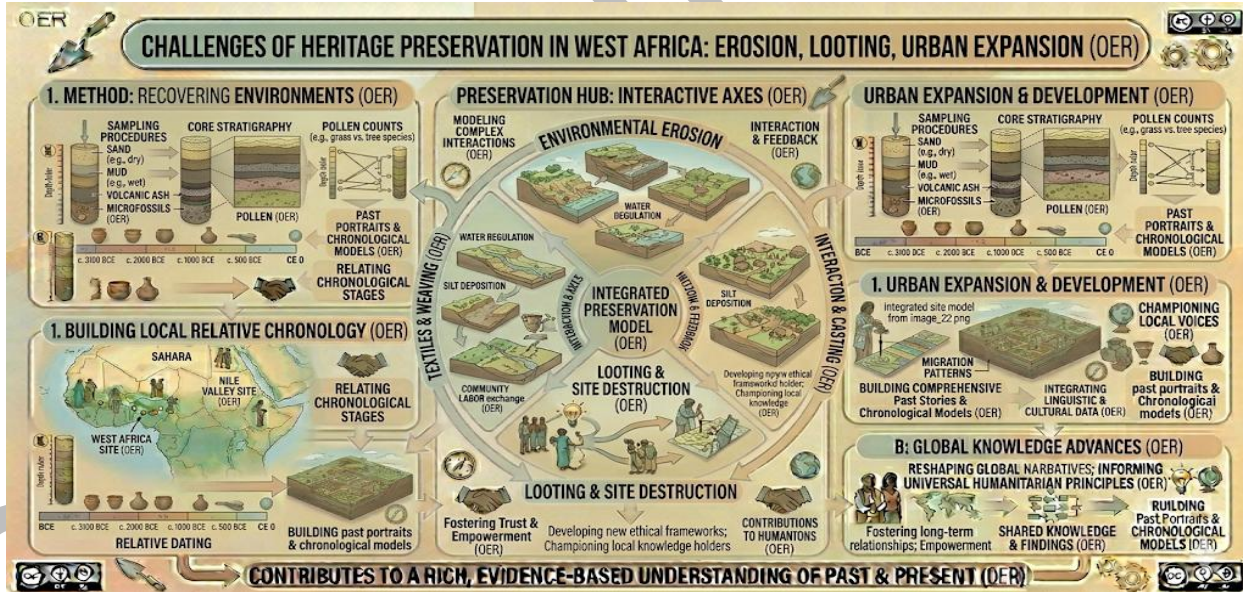
4. Who are griots?
5. Why are oral traditions important for historical memory?

5.4 Preservation and Contemporary Relevance of Heritage

5.4.1 Challenges of heritage preservation

Preserving **heritage** in West Africa involves safeguarding cultural sites, artefacts, and traditions for future generations. However, this process faces several challenges. Natural factors such as erosion, desertification, and climate change threaten archaeological sites and monuments. Human activities, including urban expansion, looting, and neglect, also contribute to the deterioration of heritage resources.

Limited funding and inadequate policies often hinder effective preservation. Without proper conservation measures, valuable cultural assets risk being lost, weakening the link between past and present.



Short description: Diagram showing challenges of heritage preservation such as erosion, looting, and urban expansion.

Caption: Figure 5.7 Challenges of heritage preservation in West Africa



Fill in the blank: Natural factors such as erosion and _____ threaten archaeological sites and monuments.

5.4.2 Heritage and modern identity in West Africa

Heritage plays a vital role in shaping **modern identity**. Cultural traditions, oral histories, and material culture provide communities with a sense of belonging and continuity. In West Africa, heritage is celebrated through festivals, museums, and educational initiatives that connect people to their history.

Heritage also contributes to national pride and international recognition. By preserving and promoting cultural assets, societies strengthen their identity and foster unity. In contemporary contexts, heritage serves as both a reminder of the past and a resource for future development.

Box 5.8 Heritage and modern identity in West Africa

Element	Modern Expression	Impact on Identity
Festivals	Cultural celebrations like the Durbar, Argungu, or FESPACO.	Social Cohesion: Reaffirming ethnic and national unity through shared performance and ritual.
Museums	Transition from "Colonial Repositories" to Centers of Black Civilization.	Reclamation: Providing a space for the "return" of heritage and the celebration of indigenous innovation.



Element	Modern Expression	Impact on Identity
Education	Use of OER and localized curricula.	Intellectual Sovereignty: Teaching history from an African-centered perspective to empower the youth.
National Pride	Symbols, monuments, and UNESCO World Heritage status.	Global Recognition: Asserting the region's historical importance on the world stage.

Fill in the blank: Heritage contributes to national pride and international _____.

Pilot questions 5.4

1. What natural factors threaten heritage preservation?
2. Mention one human activity that affects heritage sites.
3. Why is funding important for preservation?
4. How does heritage shape modern identity?
5. Give one way heritage is celebrated in West Africa today.

Series Summary

This Series explored the rise of complex societies, trade networks, and cultural heritage in West Africa, emphasising their importance for understanding the region's historical development and identity. Its purpose was to show how communities evolved from farming settlements into organised societies, how trade connected West Africa to wider regions, and how heritage continues to shape modern identity.



We began with the emergence of complex societies, examining their defining characteristics and archaeological evidence. Then we studied trade networks, moving from local and regional exchanges to trans-Saharan connections. Afterwards, we explored cultural heritage and identity, focusing on material culture, traditions, and oral histories. Finally, we considered the preservation and contemporary relevance of heritage, highlighting challenges and its role in shaping modern identity. By completing this Series, you should now be able to define complex societies, analyse trade systems, describe cultural heritage, and evaluate its preservation and relevance, as outlined in the Series Learning Outcomes.

Glossary Of Terms

- **Archaeological evidence:** Material remains such as artefacts, architecture, and trade goods that reveal past human activity.
- **Complex society:** A community with advanced social, political, and economic organisation, including leadership and specialised labour.
- **Griot:** A West African storyteller or oral historian who preserves and transmits cultural memory.
- **Heritage:** Cultural traditions, artefacts, and practices passed down through generations.
- **Material culture:** Physical objects created by a society, such as pottery, textiles, and sculptures.
- **Oral traditions:** Spoken accounts, stories, and songs passed down through generations to preserve history and identity.
- **Trans-Saharan trade:** Economic and cultural exchange system linking West Africa to North Africa and beyond.



Concept Check Questions 5

Objective questions

1. Complex societies are marked by permanent settlements, specialised labour, and _____ structures. (Linked to SLO 5.1)
2. The Nok culture of Nigeria is known for its terracotta _____. (Linked to SLO 5.2)
3. Regional trade developed as communities specialised in products such as salt and _____ nuts. (Linked to SLO 5.3)
4. The trans-Saharan trade connected West Africa to _____ Africa and beyond. (Linked to SLO 5.4)
5. Material culture refers to physical objects and _____ created by a society. (Linked to SLO 5.5)

Short-answer questions

6. Define a complex society. (Linked to SLO 5.1)
7. Mention one type of archaeological evidence of early complexity. (Linked to SLO 5.2)
8. Name one product commonly traded regionally in West Africa. (Linked to SLO 5.3)
9. Why was trans-Saharan trade culturally significant? (Linked to SLO 5.4)
10. What are oral traditions? (Linked to SLO 5.6)

Long-answer questions

11. Explain the characteristics of complex societies in West Africa. (Linked to SLO 5.1)
12. Describe archaeological evidence that demonstrates early social complexity. (Linked to SLO 5.2)
13. Analyse local and regional trade systems in West Africa. (Linked to SLO 5.3)
14. Evaluate the significance of trans-Saharan trade connections. (Linked to SLO 5.4)
15. Describe material culture and traditions as expressions of heritage. (Linked to SLO 5.5)



16. Explain the role of oral traditions in preserving historical memory. (Linked to SLO 5.6)
17. Assess challenges of heritage preservation in West Africa. (Linked to SLO 5.7)
18. Evaluate the relevance of heritage for modern identity in West Africa. (Linked to SLO 5.8)

Answers To Concept Check Questions 5

Objective questions

1. Leadership
2. Sculptures
3. Kola
4. North
5. Structures

Short-answer questions

6. A community with advanced organisation, leadership, and specialised labour.
7. Monumental architecture or Nok terracotta.
8. Salt or textiles.
9. It spread religion, ideas, and technologies.
10. Spoken accounts passed down through generations.

Long-answer questions

11. **Basic response:** Complex societies had permanent settlements, leadership, and specialised labour. **Value-added response:** They also displayed cultural sophistication through religion, art, and monumental architecture.
12. **Basic response:** Evidence includes terracotta, monumental structures, and trade artefacts. **Value-added response:** These show organised settlements, craft production, and social hierarchy.



13. **Basic response:** Local trade exchanged food and tools, while regional trade specialised in salt and kola nuts. **Value-added response:** These systems fostered cooperation and laid foundations for larger networks.
14. **Basic response:** Trans-Saharan trade exchanged gold, salt, and slaves. **Value-added response:** It also spread religion, manuscripts, and cultural ideas, shaping civilisation.
15. **Basic response:** Material culture includes pottery, textiles, and sculptures. **Value-added response:** These items expressed identity, artistry, and social status.
16. **Basic response:** Oral traditions preserve history through stories and songs. **Value-added response:** Griots acted as custodians of collective memory, shaping identity.
17. **Basic response:** Challenges include erosion, looting, and lack of funding. **Value-added response:** Urban expansion and weak policies also threaten heritage preservation.
18. **Basic response:** Heritage shapes identity through traditions and festivals. **Value-added response:** It fosters national pride, unity, and international recognition.

Answers To Pilot Questions 5

Part 5.1

1. A community with advanced organisation.
2. Specialised labour.
3. Monumental architecture.
4. Terracotta sculptures.
5. It shows economic networks.

Part 5.2

1. Food, pottery, tools.
2. Salt.



3. Gold and salt.
4. It spread religion and ideas.
5. Timbuktu.

Part 5.3

1. Physical objects created by a society.
2. Pottery.
3. Spoken accounts passed down generations.
4. Storytellers or oral historians.
5. They preserve history and identity.

Part 5.4

1. Erosion and desertification.
2. Looting.
3. It supports conservation measures.
4. It provides belonging and continuity.
5. Festivals.



References And Attributions 5

- **Figures and Boxes suggested in Series 5:**

- Figure 5.1 Characteristics of complex societies in West Africa
- Box 5.2 Archaeological evidence of early complexity in West Africa
- Figure 5.3 Local and regional trade networks in West Africa
- Box 5.4 Key features of trans-Saharan trade
- Figure 5.5 Material culture and traditions in West Africa
- Box 5.6 Oral traditions and historical memory in West Africa
- Figure 5.7 Challenges of heritage preservation in West Africa
- Box 5.8 Heritage and modern identity in West Africa

- **AI prompt suggestions used for illustration placeholders:**

- Diagrams showing characteristics of societies, trade networks, material culture, and preservation challenges.
- Boxes summarising archaeological evidence, trade features, oral traditions, and heritage relevance.

- **Open Educational Resource (OER) search strings suggested:**

- “West Africa complex societies characteristics OER”
- “West Africa archaeology evidence complex societies OER”
- “West Africa local regional trade archaeology OER”
- “West Africa trans-Saharan trade goods cultural impact OER”
- “West Africa material culture traditions OER”
- “West Africa oral traditions historical memory OER”
- “West Africa heritage preservation challenges OER”



- “West Africa heritage modern identity OER”

- **General references (APA style):**

- Connah, G. (2004). *African archaeology: A critical introduction*. Cambridge University Press.
- McIntosh, S. K. (1999). *Beyond chiefdoms: Pathways to complexity in Africa*. Cambridge University Press.
- Holl, A. F. C. (2009). *Early pastoral societies in West Africa*. Journal of African Archaeology.
- Shaw, T. (1978). *Nigeria: Its archaeology and early history*. Thames and Hudson.

