

Lesson Plan: Agrarian Civilizations: Agriculture in the Nile Basin

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As a **High School History** or **Economics** or **Agriculture** teacher, you can use this set of computer-based tools to teach about the **rise of agriculture** and the concomitant **rise of agrarian societies/civilizations**. This lesson plan will show how **Egyptian Civilization** thrived with agriculture, the latter being important for present day Egyptian economy also and is now threatened by climate change.

This lesson plan teaches about how agricultural practices evolved across the globe and in Egypt specifically. It will show how **Egyptian civilization** rose around the **Nile Basin** and has always been dependent on agriculture for food security, livelihoods and for its economy. However, recent climate disturbances causing frequent flooding and drought in the Nile Basin has adversely affected agriculture and thus pose a threat to Egyptian society. This lesson plan includes a resource for students to understand the link between climatic factors and crop yield in Egypt and/or other parts of the world.

Thus, the use of this lesson plan allows you to integrate the teaching of a climate science topic with a core topic in **History** or **Economics** or **Agriculture**.

Use this lesson plan to help your students find answers to:

1. What are agrarian societies?
2. How did agriculture help in establishing ancient civilizations? Give examples.
3. What was the socio-economic importance of agriculture in ancient Egyptian civilization?
4. How does climate change pose a threat to present day Egypt's food security and agricultural economy?
5. How are agricultural economies in the world being possibly affected by climate change? Give examples.

[About the Lesson Plan](#)

Grade Level: High School

Discipline: History, Economics, Agriculture

Topic(s) in Discipline: Agrarian Society, Agriculture and Civilizations, Ancient Civilizations, Egyptian Civilization, Nile Basin, Agricultural Economy, Food Security

Climate Topic: Climate and the Anthroposphere, Climate and the Biosphere

Location: Global, Egypt

Access: Online, Offline

Language(s): English

Approximate Time Required: 45-50 min

1 Contents

1. Reading (10 min)

A reading to introduce the topic of agrarian societies, how they are formed and what are their characteristics.

This can be accessed at:

<https://www.worldatlas.com/what-is-an-agrarian-society.html>

2. Infographic (5-10 min)

An infographic to show the rise of ancient agrarian civilizations including the Egyptian society.

This can be accessed at:

https://cdn.kastatic.org/KA-share/BigHistory/KU7.1.1_AG_CIV_Infographic.pdf

3. Reading (15 min)

A reading that describes the significance of agriculture for Egypt from ancient times to the present day.

This can be accessed at:

<https://www.ancient.eu/article/997/ancient-egyptian-agriculture/>

4. Infographic (5 min)

An infographic to show how climate change could affect Egypt's agricultural yield in time to come.

This can be accessed at:

<https://gro-intelligence.com/insights/infographics/climate-change-agriculture-yields>

5. Classroom/Laboratory Activity (15 min)

An interactive teaching module to explore the link between various climatic factors and the crop yield of Egypt and/or different parts of the world.

This can be accessed at:

<https://www.opengeography.org/agriculture.html>

6. Suggested questions/assignments for learning evaluation

- What are agrarian societies?
- How did agriculture help in establishing ancient civilizations? Give examples.
- What was the socio-economic importance of agriculture in ancient Egyptian civilization?
- How does climate change pose a threat to present day Egypt's food security and agricultural economy?
- How are agricultural economies in the world being possibly affected by climate change? Give examples.

2 Step-by-step User Guide

Here is a step-by-step guide to using this lesson plan in the classroom/laboratory. We have suggested these steps as a possible plan of action. You may customize the lesson plan according to your preferences and requirements.

1. Topic introduction and discussion

Use the reading, '[What Is An Agrarian Society?](#)' by WorldAtlas.com to define and describe agrarian societies. Use the text to describe various aspects of agrarian societies such as how they came about, what are their main characteristics, their modes of production, their socio- economic role, and present-day agrarian communities. Discuss the challenges faced by them including the threats of failed crops due to climatic factors.

This can be accessed at:

<https://www.worldatlas.com/what-is-an-agrarian-society.html>

2. Extend understanding of the importance of agriculture for rise of civilizations

Use the infographic, '[Agriculture & Civilization](#)' by Khan Academy to explain the rise and establishment of a several ancient civilizations across the globe, based on agricultural practices. Discuss the particularities of these different societies such as their geographical locations, local weather conditions, and the crops grown. Use the examples in the infographic to emphasize on the importance of having fertile soils and an abundance of fresh water supply for the establishment of a successful civilization. Thus, explain that these civilizations were generally found in fertile river valleys like the Nile Basin for the Egyptians.

This can be accessed at:

https://cdn.kastatic.org/KA-share/BigHistory/KU7.1.1_AG_CIV_Infographic.pdf

3. Develop the topic further by discussing about agriculture in ancient Egyptian Civilization

Use the reading, '[Ancient Egyptian Agriculture](#)' by Joshua J. Mark, Ancient History Encyclopedia to discuss how ancient Egyptian civilization thrived in the Nile Basin. Use the text to explain how the Nile was instrumental in establishing the Egyptian agrarian society and was also important for trade and commerce. Explain how it became a part of Egyptian culture while several engineering innovations were developed to utilize the river's water to the optimum for crop cultivation and animal husbandry. Use the text to describe the importance of agriculture for the rulers of Egypt for garnering wealth through barter and collection of taxes in the form of grains. Discuss how latter-day Egypt served as the 'breadbasket' for the Roman Empire and the subsequent Arab invasion. Finally, discuss how despite technological advances in major commercial ventures, traditional farming practices continue among the small Egyptian farmers and agriculture remains an important part of the country's economy.

This can be accessed at:

<https://www.ancient.eu/article/997/ancient-egyptian-agriculture/>

4. Discuss the possible effect of climate change on present day Egypt's agriculture

Use the infographic, '[Climate & Agricultural Yields](#)' by World Bank to briefly talk about the possible impact of climate change on the projected agricultural yields leading up to the year 2050 in Egypt and several other countries. Use the tool for an enquiry-based discussion on what climatic factors could possibly affect the Egyptian agricultural economy.

This can be accessed at:

<https://gro-intelligence.com/insights/infographics/climate-change-agriculture-yields>

5. Classroom/Laboratory Activity

Use the teaching module, '[Agriculture](#)' by Open Geography Education, to enable your students to explore the role of climatic factors on crop yield in present day Egypt and/or other regions of the world. Use the tab, 'Agricultural Patterns Assignment' to follow a step-by step guide to explore the visualization tool (ArcGIS Online Map), 'Agricultural Patterns' to answer questions such as 'What factors affect crop yield?', 'Does

crop yield always depend on rainfall?', 'What role does temperature play in crop yields', and 'How does agriculture affect population?'. Use the Online Map to visualize the effect of various climatic parameters such as annual terrestrial surface temperature and annual precipitation on crop yields in Egypt and/or any selected region. Correlate these observations with non-climatic parameters such as population density and soil fertility constraints, to highlight the significance of altered crop yield due to climatic factors for the chosen region. Finally, use the observations to enable a classroom discussion on the possible impact of climate change on the agricultural productivity of a region.

This can be accessed at:

<https://www.opengeography.org/agriculture.html>

6. Questions/Assignments

Use the tools and the concepts learned so far to discuss and determine answers to the following questions:

- What are agrarian societies?
- How did agriculture help in establishing ancient civilizations? Give examples.
- What was the socio-economic importance of agriculture in ancient Egyptian civilization?
- How does climate change pose a threat to present day Egypt's food security and agricultural economy?
- How are agricultural economies in the world being possibly affected by climate change? Give examples.

3 Learning Outcomes

The tools in this lesson plan will enable students to:

- understand what agrarian societies are

- learn how several ancient civilizations rose and flourished because of agriculture
- discuss the importance of agriculture for Egypt's food security and socio-economic stature.
- explain the possible threats posed by climatic factors to Egypt's agricultural economy

4 Additional Resources

If you or your students would like to explore the topic further, these additional resources will be useful.

1. Reading

A reading, 'Climate-Smart Agriculture' (CSA) by FAO to know about CSA practices as a climate adaptation strategy by agricultural economies such as Egypt.

This can be accessed at:

<http://www.fao.org/climate-smart-agriculture/overview/en/>

2. Teaching Module

A teaching module, 'Agriculture & Civilization' by Khan Academy to teach the topic in detail.

This can be accessed at:

<https://www.khanacademy.org/partner-content/big-history-project/agriculture-civilization>

5 Credits/Copyrights

All the teaching tools in our collated list are owned by the corresponding creators/authors/organizations as listed on their websites. Please view the individual copyright and ownership details for each tool by following the individual links provided. We have selected and analyzed the tools that align with the overall objective of our project and have provided the corresponding links. We do not claim ownership of or responsibility/liability for any of the listed tools.

1. Reading; 'What Is An Agrarian Society?'

By [WorldAtlas.com](https://www.worldatlas.com).

2. Infographic; 'Agriculture & Civilization'

By [Khan Academy](https://www.khanacademy.com)

3. Reading; 'Ancient Egyptian Agriculture'

Written by Joshua J. Mark. Published by [Ancient History Encyclopedia](https://www.ancient-history.com).

4. Infographic; 'Climate Change & Agricultural Yields'

Developed by [Gro Intelligence](https://www.grointelligence.com). Source: [World Bank](https://www.worldbank.org).

5. Classroom/Laboratory Activity; 'Agriculture'

By [Open Geography Education](https://opengeographyeducation.com).

6. Additional Resources

[Food and Agriculture Organization \(FAO\)](https://www.fao.org)

[Khan Academy](https://www.khanacademy.com)