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“The Nile Basin: A Look at Ethiopia’s Grand Dam Plan”

Teaching Water: Global Perspectives on a Resource in Crisis

August 5-8, 2013, Harvard University

Time Tag: 2:00 – 5:0

Introduction and broad discussion of the water cycle

Content

Themes of water stress and scarcity in the context of fresh water vs. salt water

Viewing Question

What is your perception of how much water the Earth has available for our use?

Time Tag: 5:00 – 8:00

The World Water Cycle

Content

Conflict related to water: examples include the Mekong and the Vietnam War, and the Indus River and India/Pakistan.

Viewing Question

When thinking about how natural resources cause conflict, how are oil and water different?

Time Tag: 8:00 – 14:50

Exploration of maps

Content

Using maps to understand precipitation, freshwater stress over time, agricultural, domestic, and industrial water usage.

Defining water stress vs. water scarcity

Viewing Question

Why might the percentage or type of water use be different in different regions? (For example, domestic water is a higher percentage of overall water usage in the U.S. compared to other countries.)

Time Tag: 14:50 – 17:55**Climate Variability tool****Content**

Explanation of the Intertropical convergence zone

Viewing Question

What drives changes in precipitation?

Resource Connection

“Introduction to Africa: Geography and Culture,” an online resource developed by Harvard’s Committee on African Studies, goes into further detail about the intertropical convergence zone, as it relates to Africa. This resource can be found online at the following link:

<http://africa.harvard.edu/wp-content/uploads/Introduction-to-African-Geography-and-Culture.pdf>

Time Tag: 17:55 – 20:30**Water Management, Water Systems****Viewing Question**

What are the goals of having these systems in place?

Time Tag: 20:30 – 31:50**Economics Focus: Demand is outpacing Supply of high quality water****Content**

Changing Populations, Competing demands, Variable supply, Climate Change

Security vs. Sustainability

Upstream vs. Downstream issues

Renewable vs. Nonrenewable Resources

Viewing Questions

How can we provide water in the 21st century? Why might the situation be different now compared to 100 years ago?

Should we focus on solving today's issues or thinking about the future?

Who are the various stakeholders in all of these situations?

In what ways are these problems global? In what ways are they local? How might stakeholders in different regions answer this question?

Time Tag: 31:50 – 42:00

Nile Basin Transition

Content

Transboundary river issues in the Nile Basin: background, geography, history of Nile River allocation up to present day

Egyptian economic strength and regional influence vs. Egyptian vulnerability as downstream nation. 87% of water that reaches Egypt originates in Ethiopia.

Viewing Questions

The Nile is sometimes called the Blue Nile, the White Nile, or the Main Nile. Why does it have so many different names? How are they different?

What countries rely on the Nile River Basin?

How have decisions about water allocation along the Nile River been related to colonialism?

Resource Connections

Special series, "Water Grabbers: A Global Rush on Freshwater" by *National Geographic*.

"The Life-Giving Nile River." Is available online at the following link:

<http://news.nationalgeographic.com/news/2012/12/121218/pictures-life-giving-nile-river-photos/>

Professor Aaron Tesfaye, William Paterson University, whose work as a Political Scientist also looks at the Nile Basin.

Available online at the following link:

http://aigaforum.com/articles/Hydropolitic_in_the_NileBasin.pdf

Time Tag: 42:00 – 48:25

Hydropower Potential of Ethiopia

Content

Comparing and contrasting Ethiopia's hydropower with hydropower in global context

Importance of a strategic development plan

Viewing Question

What are the benefits of hydropower? Which stakeholders does it benefit on local and global scales?

Time Tag: 48:25 – 59:25

Grand Dam in Ethiopia

Content

Developing a large reservoir: project cost

Regional and international responses

Reservoir filling policies: percent based vs. threshold based

Project as example of non-cooperation amongst stakeholder regions

Viewing Questions

What does the construction of this dam mean for the countries downstream?

What is the role of risk management in a situation like this?

Resource Connection

Students can explore local news sources that have reported on this project. For example:

<http://www.trust.org/item/20130812133857-74iy1/>

<http://www.scotsman.com/news/peter-jones-wars-over-water-could-flood-world-1-3062639>

<http://www.csmonitor.com/World/Africa/2013/0625/Will-Ethiopia-s-grand-new-dam-steal-Nile-waters-from-Egypt>

Time Tag: 59:35

Question and Answer from the audience