Lesson Plan: Climate Change Impacts in Togo

As a **High School** or introductory **Undergraduate** teacher, you can use this lesson plan to **introduce climate change and its impacts in Togo**.

This lesson plan provides an introduction to climate change, causes and impacts of climate change globally, climate change risk profile for Togo that includes climate impacts on major sectors of the country such as agriculture, water resources & energy, human health and ecosystems.

Thus, the use of this lesson plan allows you to teach Climate Science and Climate Change in your classrooms.

Use this Lesson Plan to help the students to understand and find answers to:

- 1. What is Climate Change? What are its causes?
- 2. What are the impacts of climate change on Togo?
- 3. What are the impacts of climate change on agriculture, water resources & energy, human health and ecosystems in Togo?
- 4. What mitigation practices can be adopted to control the impacts of climate change in Togo?

About the Lesson Plan

Grade Level	High School, Undergraduate	
Climate Topic	Climate Change Impacts in Your Country	
Location	Africa, Togo	
Access	Online	
Language(s)	English	
Approximate Time Required	60 mins	

Contents

	Reading (15 min) and Video (5-15 min)	A reading from the NASA Global Climate Change website that includes information about what is the scientific evidence for climate change, causes, and impacts of climate change. This can be accessed here .	
		Optional : A set of 7 short video micro-lectures (2-5 minutes in length) on climate change and global warming developed by the National Research Council, The National Academies of Sciences, Engineering, and Medicine. This can be accessed here	
	Reading 1 (World Bank)	A reading by Climate Change Knowledge Portal of the World Bank that explains climate change and impacts in Togo.	
		This can be accessed <u>here</u> .	
3	Reading 2 (USAID)	This reading is the Climate Change Risk Profile fact sheet for West Africa by Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners USAID. This can be accessed here.	
	Classroom/Lab A classroom/laboratory activity based on a reading and video on Togo.		
	oratory Activity (15 min)	reading and video explains the causes and impacts of Togo on Togo and also states the possible solutions to counter the crisis.	
		The reading can be accessed here. The video can be accessed here.	

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	Introduce Climate Change through the readings and videos	This reading titled, "The Causes of Climate Change" from the NASA Global Climate Change website, provides introductory information on climate change and global warming. It contains information on the scientific evidence of climate change, its causes and impacts.	
		This can be accessed <u>here</u> .	
		Optional: This set of 7 short video micro-lectures (2-5 minutes in length) have been developed by the National Research Council, The National Academies of Sciences, Engineering, and Medicine. This can be used to provide additional information on climate change.	
		They include:	
		 What is Climate? Climate Change, Lines of Evidence Chapter 1 Is Earth Warming? Climate Change, Lines of Evidence Chapter 2 	
		3. Greenhouse Gasses. Climate Change, Lines of Evidence Chapter 34. Increased Emissions. Climate Change, Lines of Evidence Chapter 4	
		5. How Much Warming? Climate Change, Lines of Evidence Chapter	
		5 6. Solar Influence. Climate Change, Lines of Evidence Chapter 6 7. Natural Cycles. Climate Change, Lines of Evidence Chapter 7	
		This video playlist can be accessed <u>here</u> .	

Digauga aguaga and	Use this interactive website by the Climate Change Knowledge Portal of the	
	World Bank to have your students understand the impacts of Climate	
	Change in Togo. This resource includes the following:	
	I. Climate Change Overview of Togo	
	II. Country Summary	
	III. Current Climatology: Climate Trends and Variability in	
	Temperatures and Precipitation	
	IV. Climate Projections	
	V. Vulnerability of Togo to Climate Change	
	Each section contains relevant climate change information including data, projections, and visualizations. The data is visualized through interactive graphs and users can select different indices, model projections, timescales, and sectors to better understand the impacts of climate change in Togo.	
	This can be accessed <u>here</u> .	
Further understanding on impacts of Climate Change on key sectors in Togo	You may wish to have your students explore climate change and its risks in West Africa in more detail through a resource from climatelinks: A Global Knowledge Portal for Climate and Development Practitioners of the USAID.	
	This factsheet on climate risks in West Africa includes information on: I. Current and future climate impacts and vulnerabilities II. Climate impacts on key sectors of: 1) Agriculture 2) Water Resources 3) Urban areas 4) Ecosystems 5) Energy	
	This can be accessed <u>here</u> .	
OPTIONAL	You may wish to conduct a {roleplay} activity in your classroom/laboratory	
	to further engage your students in understanding the climate crisis in	
Activity on the 'Lake Chad Crisis'	Togo; specifically on the impact of climate change on food security and water security in Togo.	
	on impacts of Climate Change on key sectors in Togo OPTIONAL Classroom/Laboratory Activity on the 'Lake	

Learning Outcomes:

The tools in this lesson plan will enable students to:

- learn about climate change and global warming
- understand the impacts of climate change in Togo
- discuss how changing weather patterns due to climate change could affect future of Togo
- describe the current and future health risks and economic impacts on Togo due to climate change

Additional Resources

1.	Reading	Climate Risk Country Profile for Togo: This reading by Climate Change Knowledge Portal of World Bank explains in detail the Climatology, Climate related Natural Hazards & Impacts and Policies and Programs in Togo.
2.	Reading	West Africa Greenhouse Gas Emissions Fact Sheet: This fact sheet for West Africa by Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners of the USAID, provides information on greenhouse gas emissions (GHG) by sector, changes in emissions, information on carbon intensity, as well as climate change mitigation targets and plans.
3	Reading	Intended Nationally Determined Contribution, Togo: This report provided by UNFCCC is a submission of commitment towards mitigating Climate Change by Togo.

Credits / Copyrights:

1	Reading "The Causes of Climate Change"	by the <u>NASA Global Climate Change</u> website
2	A set of videos; "Climate Change: Lines of Evidence"	Presented by National Research Council, <u>The National Academies of Sciences</u> , <u>Engineering</u> , and <u>Medicine</u>
3	Reading "Climate Change Risk Profile for Togo"	By <u>Climate Change Knowledge Portal of the</u> <u>World Bank</u>
4	Reading "Climate Change Risk Profile for Togo"	By <u>Climatelinks</u> : A Global Knowledge Portal for Climate and Development Practitioners, USAID
	Additional Resources	Climate Risk Country Profile for Togo
		West Africa Greenhouse Gas Emissions Fact Sheet
		Intended Nationally Determined Contribution, Togo