### Lesson Plan: Climate Change Impacts in Democratic Republic of Congo

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

This lesson plan provides an introduction to climate change, causes and impacts of climate change globally, climate change risk profile for Congo 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 Congo?
- 3. What are the impacts of climate change on agriculture, water resources & energy, human health and ecosystems in Congo?
- 4. What mitigation practices can be adopted to control the impacts of climate change in Congo?

#### **About the Lesson Plan**

Grade Level	High School, Undergraduate	
Climate Topic	Climate Change Impacts in Your Country	
Location	Africa, Democratic Republic of Congo	
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 <a href="here">here</a> .	
	<b>Optional</b> : 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 <a href="here">here</a>	
Reading 1	A reading by Climate Change Knowledge Portal of the World Bank that explains	
(World Bank)	climate change and impacts in Congo.	
	This can be accessed <u>here</u> .	
Reading 2 (USAID)	This reading is the Climate Change Risk Profile fact sheet for Congo by Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners USAID.	
	This can be accessed here.	
Classroom/Lab oratory Activity (15 min)	A classroom/laboratory activity based on a reading and video on Congo. This	
	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:	
		<ol> <li>What is Climate? Climate Change, Lines of Evidence Chapter 1</li> <li>Is Earth Warming? Climate Change, Lines of Evidence Chapter 2</li> </ol>	
		<ul><li>3. Greenhouse Gasses. Climate Change, Lines of Evidence Chapter 3</li><li>4. Increased Emissions. Climate Change, Lines of Evidence Chapter 4</li></ul>	
		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> .	

2	Discuss causes and	Use this interactive website by the Climate Change Knowledge Portal of the	
-	impacts of Climate	World Bank to have your students understand the impacts of Climate	
	Change in Congo	Change in Congo. This resource includes the following:	
		I. Climate Change Overview of Congo	
		II. Country Summary	
		III. Current Climatology: Climate Trends and Variability in	
		Temperatures and Precipitation	
		IV. Climate Projections	
		V. Vulnerability of Congo 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 p		
	timescales, and sectors to better understand the impacts of climate cha		
	in Congo.		
		This can be accessed <u>here</u> .	
3	Further understanding	You may wish to have your students explore climate change and its risks in	
3	on impacts of Climate	Congo in more detail through a resource from climatelinks: A Global	
	Change on key sectors   Knowledge Portal for Climate and Development Practitioners of the		
	in Congo	USAID.	
		This factsheet on climate risks in Congo includes information on:  I. Current and future climate impacts and vulnerabilities in Congo.	
		II. Climate impacts on key sectors of:	
		1) Agriculture	
		2) Water Resources & Energy	
		3) Human Health	
		4) Ecosystems	
		This can be accessed here.	
-		You may wish to conduct a {roleplay} activity in your classroom/laboratory	
4	OPTIONAL Classroom/Laboratory		
		to further engage your students in understanding the climate crisis in Congo; specifically on the impact of climate change on food security and	
	Activity on the 'Lake Chad Crisis' Congo; specifically on the impact of climate change on food sewarts security in Congo.		
	Chau Crisis	water security in Congo.	

## **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 Congo
- discuss how changing weather patterns due to climate change could affect future of Congo
- describe the current and future health risks and economic impacts on Congo due to climate change

### **Additional Resources**

1.	Reading	Climate Risk Country Profile for Congo: 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 Congo.	
2.	Reading	Congo Greenhouse Gas Emissions Fact Sheet: This fact sheet by Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners of the USAID, gives information about change in GHG Emissions in Southern Africa (1990-2014), GHG Emissions Relative to GDP and Mitigation Targets.	
3	Reading	Climate Risks in Food for Peace Geographies- Dem. Rep. Congo: This fact sheet by Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners of the USAID, gives information about impacts of Climate Change on food security in Dem. Rep. Congo.	
4	Reading	Intended Nationally Determined Contribution, Congo: This report provided by UNFCCC is a submission of commitment towards mitigating Climate Change by Congo.	

# **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, Engineering, and Medicine</u>
3	Reading "Climate Change Risk Profile for Congo"	By <u>Climate Change Knowledge Portal of the</u> <u>World Bank</u>
4	Reading "Climate Change Risk Profile for Congo"	By <u>Climatelinks</u> : A Global Knowledge Portal for Climate and Development Practitioners, USAID
	Additional Resources	Climate Risk Country Profile for Congo
		Congo Greenhouse Gas Emissions Fact Sheet
		Climate Risks in Food for Peace Geographies- Dem. Rep. Congo
		Intended Nationally Determined Contribution, Congo