Lesson Plan: Climate Change Impacts in Mozambique

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

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

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 Mozambique?
- 3. What are the impacts of climate change on agriculture, water resources, human health and coastal resources in Mozambique?
- 4. What mitigation practices can be adopted to control the impacts of climate change in Mozambique?

About the Lesson Plan

Grade Level	High School, Undergraduate
Climate Topic	Climate Change Impacts in Your Country
Location	Africa, Mozambique
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 <u>here</u> . 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 <u>here</u>	
Reading 1 (World Bank)	A reading by Climate Change Knowledge Portal of the World Bank that explains climate change and impacts in Mozambique.	
	This can be accessed <u>here</u> .	
Reading 2 (USAID)	This reading is the Climate Change Risk Profile fact sheet for Mozambique by Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners USAID.	
	This can be accessed <u>here</u> .	
Classroom/Lab		
oratory Activity		
(15 min)	Mozambique 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 Greenhouse Gasses. Climate Change, Lines of Evidence Chapter 3 Increased Emissions. Climate Change, Lines of Evidence Chapter 4 How Much Warming? Climate Change, Lines of Evidence Chapter 5 Solar Influence. Climate Change, Lines of Evidence Chapter 6 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		
2	impacts of Climate	World Bank to have your students understand the impacts of Climate		
	Change in	Change in Mozambique. This resource includes the following:		
	Mozambique	I. Climate Change Overview of Mozambique		
	-	II. Country Summary		
		III. Current Climatology: Climate Trends and Variability in		
		Temperatures and Precipitation		
		IV. Climate Projections		
		V. Vulnerability of Mozambique 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 Mozambique.		
		This can be accessed <u>here</u> .		
3	Further understanding on impacts of Climate Change on key sectors in Mozambique	You may wish to have your students explore climate change and its risks in Mozambique 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 Mozambique includes information on: I. Current and future climate impacts and vulnerabilities II. Climate impacts on key sectors of: Agriculture Water Resources Human Health Coastal Zones 		
		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	Mozambique; specifically on the impact of climate change on food security		
	Chad Crisis'	and water security in Mozambique.		

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

Additional Resources

1.	Reading	<u>Climate Risk Country Profile for Mozambique</u> : 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 Mozambique.	
2.	Reading	Mozambique 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 Mozambique (1990-2013), GHG Emissions Relative to GDP and Mitigation Targets.	
3	Reading	Intended Nationally Determined Contribution, Mozambique: This report provided by UNFCCC is a submission of commitment towards mitigating Climate Change by Mozambique.	
4	Reading	<u>Mozambique Climate Vulnerability Profile</u> : This report by Climatelinks: A Global Knowledge Portal for Climate and Development Practitioners of the USAID, provides an overview of USAID program climate vulnerabilities for Mozambique.	

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</u> <u>National Academies of Sciences, Engineering, and</u> <u>Medicine</u>
3	Reading "Climate Change Risk Profile for Mozambique"	By <u>Climate Change Knowledge Portal of the</u> <u>World Bank</u>
4	Reading "Climate Change Risk Profile for Mozambique"	By <u>Climatelinks</u> : A Global Knowledge Portal for Climate and Development Practitioners, USAID
	Additional Resources	Climate Risk Country Profile for Mozambique
		<u>Mozambique Greenhouse Gas Emissions Fact</u> <u>Sheet</u>
		<u>Intended Nationally Determined Contribution,</u> <u>Mozambique</u>