

Climate change: The effects of drought and the need to educate about conservation agriculture

I. Introduction

1. What is PINEMAP?
2. Provide an overview of PINEMAP overall goal and past summer internship experience
3. Present the title or topic- **Climate Change :The effects of drought and the need to educate about conservation agriculture**
4. Mention the objectives and justification of our study or topic.

II. Climate change: Definition

1. Introduce the definition of climate change.
2. Explain how climate change will hurt agriculture and its impact on agriculture and humanity.
3. Watch short videos of climate change
 - <http://youtu.be/RHrFBOUJ6-8>

III. Drought: Definitions and causes

1. Present concept of drought and definitions
2. Explain causes of drought
3. Show brief history of severe droughts in the United States and Puerto Rico
4. Analyze recent news about drought in Puerto Rico

IV. Drought maps and graphics

1. Present importance of U.S Drought Monitor and the PDSI to categorize dry weather
2. Mention PDSI five levels of severity
3. Show maps of recent drought in Puerto Rico and graphics of reservoir water levels

V. Impacts of drought and Conservation Agriculture

1. Mention effects or impacts of drought
2. Introduce: Conservation Agriculture and vegetation management to offset drought impacts
3. Watch *youtube short video* about impacts of drought.
 - <http://youtu.be/rHWHuP91c7Y>
4. Observe a laboratory experiment to explain drought

VI. Conclusion

1. What you can do about climate change -
 - <http://youtu.be/VTfgNFz1DBM>
 - <http://youtu.be/FO46sPwm4xk>
2. Prepare a short essay or a poster about effects of climate change and drought
3. Voluntary reading of essays and present posters
4. Award or grant participation certificates to all students
5. Final activity –closing (appetizers) to share with students their experiences