James scholar report

Subject: Climate Change

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**PART I HOW SERIOUS IS GLOBAL WARMING**

Climate Change has become a global issue in the recent years, the severity of which has been raised to a height that had never been reached. It is not just a problem for meteorologist any more. Each of us in the planets, the farmers, the fishers, the city dwellers, the islanders, is facing this global issue.

**Rising of the temperature**

The first obvious effect that global warming brings us is the rising of global temperature. The earth is becoming warmer. According to the Intergovernmental Panel on Climate Change, the average of global temperature has increased by roughly 1.53°F (0.85ºC) from 1880 to 2012. As a matter of fact, 2012 is the hottest year on records in the United States. The summer is being hotter and the winter is being warmer.

**Droughts and Flooding**

The prolonged high-temperature weather leads to the droughts in some area. However, the increases temperature also leads to heavy precipitation, which causes flooding in certain areas like Northeast, Midwest and Great Plains.

**The rise of sea level**

Warmer weather has significant impact on Polar Regions. The glaciers, snow and sea iced are melting in South and North Pole. In the past century, the global average sea level has risen by about 8 inches. The higher sea level not only created a threat to the safety of coastal residents but also increased the risk of the damage to the infrastructures like roads, airports, and military bases etc. The situation is going to be worse. Thousands and hundreds of lives and hundreds of billions of property will be in danger.

**Increasing levels of carbon dioxide in the sea**

When carbon dioxide meets water, it will dissolve and form carbonic acid. The amount of carbon dioxide has increased rapidly due to the burning of fossil fuels.

As a result, ocean’s acidity has increased. “Ocean surface waters have become 30% more acid over the last 250 years as they have absorbed large amounts of carbon dioxide from the atmosphere” This change of living condition can lead to the direct death of many marine organism, especially like shellfishes. The carnivores can be affected as well because of the decreasing of the food. The marine ecological balance will be broken.

**Nature disaster**

It has been a controversial that who’s responsible for Katrina, one of the most destructive nature disasters in the history of United States. Some people believe that it’s the nature law. However others attributes to this disaster to the global warming.

Former Boston Globe reporter Ross Gelbspan pointed out:

"Although Katrina began as a relatively small hurricane that glanced off south Florida, it was supercharged with extraordinary intensity by the relatively blistering sea surface temperatures in the Gulf of Mexico."

“Tropical cyclones typically form over large bodies of relatively warm water. They derive their energy through the evaporation of water from the ocean surface, which ultimately recondenses into clouds and rain when moist air rises and cools to saturation.”(wikipedia) Therefore, the enlarged warm water area will increase the possibility of the formation of hurricanes, which endanger uncountable lives and properties.

**Human health**

Global warming can negatively affect human health in many ways. For example it will lead to many heat-related illnesses and death. Also the increasingly frequent extreme precipitation and flooding can lead to waterborne diseases. Plus, due to the sediment and contaminant concentrations after heavy precipitation, the water quality is less qualified.

So to prevent global warming, what can we do?

**PART II WHAT CAN WE DO?**