

**PENANG SANGAM HIGH SCHOOL**  
**P.O.BOX 44, RAKIRAKI**  
**LESSON NOTES WEEK 2**

Subject: Home Economics

Year/Level: 12

<b>Strand</b>	Home Management
<b>Sub Strand</b>	Housing
<b>Content Learning Outcome</b>	<ul style="list-style-type: none"><li>• Explain climate change.</li><li>• Discuss the effects of climate change.</li></ul>

### **Climate Change**

- Is a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

- A long-term change in the earth's climate, especially a change due to an increase in the average atmospheric temperature.

### **Effects of Climate Change**

#### **1. Coastal erosion**

- Water resources and human settlement on Pacific small islands will be at increasing risk with changes in temperature, rainfall and sea level rise.
- Increased in flooding cause sea level rise and causes soil erosion in coastal areas.

#### **2. Drought**

- Changing rainfall pattern will lead to water shortages and food shortage which is a major problem in many countries.

#### **3. Floods**

- Before floods used to happen only once in 100 years now take place every 10 or 20 years.

- It can be disastrous and can destroy houses, ruin lives and threaten wildlife.

#### **4. Fire**

- Fire seasons results as spring runoff in summer whereby heat builds up more quickly.
- Intensive fire are causing more damage and putting wildlife more at risk.

#### **5. Rising in temperature**

- Greenhouse gases are trapping more heat in the Earth's atmosphere, which is causing average temperatures to rise all over the world.

#### **6. Change in Landscapes**

- Hot, dry forests, rising sea levels— environmental changes brought on by global warming take a heavy toll on wildlife and human communities that rely on any given landscape for food, water, shelter, and income.

#### **7. Storms**

- As temperatures continue to rise, more and more water vapor could evaporate into the atmosphere, and water vapor is the fuel for storms.

#### **8. Illnesses**

- Weather and climate play a vital role in people's health. Changes in climate affects the average weather conditions that we are accustomed to.
- Warmer average temperatures will likely lead to hotter days and more frequent and longer heat waves.
- This could increase the number of heat-related illnesses and deaths.
- Impacts from Heat waves can lead to heat stroke and dehydration, and are the most common cause of weather-related deaths.

- Young children, older adults, people with medical conditions, and the poor are more vulnerable than others to heat-related illness.

## 9. **Climate –Sensitive Diseases**

i. *Food-borne disease* - higher air temperatures can increase case of salmonella and other bacterial-related food poisoning because bacteria grow more rapidly in warm environments.

These diseases can cause gastrointestinal distress and in severe cases death.

i. *Water borne diseases*

- Heavy rainfall or flooding can increase water - borne parasites such as *Cryptosporidium* and *Giardia* that are sometimes found in drinking water. These parasites can cause gastrointestinal distress and in severe cases, death.

ii. *Animal-borne diseases*

- Mosquitoes favor warm, wet climates and can spread diseases such as dengue fever and malaria.

iii. *Economic loss*

- Climate change is affecting businesses and economies at home and around the world. More intense hurricanes and downpours could cause billions of dollars in damage to property and infrastructure.

- High sea temperatures also threaten the survival of coral reefs, which generate income for Fiji in the food market as well as in the tourism industry. Sea -level rise, floods, droughts, wildfires, and extreme storms require extensive repair of essential infrastructure such as homes, roads, bridges, railroad tracks, airport runways, power lines, dams, levees, and seawalls.

iv. *Mass migration and security threats.*

- Global warming is likely to increase the number of "climate refugees" —people who are

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forced to leave their homes because of drought, flooding, or other climate -related disasters. Mass movements of people and social disruption may lead to civil unrest, and might even spur military intervention and other unintended consequences.

v. *Lost productivity.* Disruptions in daily life related to climate change can mean lost work and school days and harm trade, transportation, agriculture, fisheries, energy production, and tourism.

## **Activity**

1. In your words, define climate change.
2. Identify and explain two effects of climate change in your community or society.
3. Discuss the 3 climate sensitive diseases.