

PENANG SANGAM HIGH SCHOOL
P.O.BOX 44 RAKIRAKI
HOME ECONOMICS
YEAR 11 (week 11)

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| Strand | Food And Nutrition | <ul style="list-style-type: none"> • The alarming signs are already visible in rising seas, heat waves, worsening droughts and stronger hurricanes in Fiji Islands. |
| Sub strand | FOOD SUPPLY (cont" from week 10) | |
| Content learning outcome | a. identify the cultural and geographical influence of obtaining food. b. explain the effect of agriculture on the environment and its impact on food availability c. discuss ways of ensuring food security at home. | <ul style="list-style-type: none"> • These are expected to have major effects on soil and water resources, which will have direct impacts on agriculture and food production. • Overall, climate changes including global warming and increased climate variability could result in a variety of impacts on agriculture. |

**EFFECTS OF AGRICULTURE METHODS ON OUR ENVIRONMENT
 DEFORESTATION**

- Cutting down of trees for selling or removing trees or forests to make land available for other use.
- The loss of trees and other vegetation can cause climate change, desertification, soil erosion, fewer crops, flooding, increased greenhouse gases in the atmosphere, and a host of problems for indigenous people.

CLIMATE CHANGE

- Plants absorb Carbon Dioxide CO₂ (a greenhouse gas) from the atmosphere and uses it to produce food (carbohydrates, fats, and proteins that make up trees).
- In return, it gives off Oxygen. Destroying the forests means that CO₂ will remain in the atmosphere and in addition, destroyed vegetation will give off more CO₂ stored in them as they decompose.
- This will alter the climate of that region. Cool climates may get a lot hotter and hot places may get a lot cooler.
- Climate change, however, will affect food production because of changes in temperature and rainfall Overall, climate changes

- including global warming and increased climate variability could result in a variety of impacts on agriculture.

THE IMPACTS OF CLIMATE CHANGE ON PEOPLE AND FOOD

- The alarming signs are already visible in rising seas, heat waves, worsening droughts and stronger hurricanes in Fiji Islands.
- These are expected to have major effects on soil and water resources, which will have direct impacts on agriculture and food production.
- Overall, climate changes including global warming and increased climate variability could result in a variety of impacts on agriculture.
- Some of the impacts of climate change on food production which are already visible and seem to be increasing are:
- Increased heat stress to crop and livestock, e.g. higher night temperatures which could adversely affect grain formation and other aspects of crop development.
- Increased evaporation -transpiration rate caused by higher temperatures and lower soil moisture levels, Concentration of rainfall into a smaller number of rainy events with increases in the number of days with heavy rain, increasing erosion and flood risks.
- Changes in seasonal distribution of rainfall, with less falling in the main crop growing season, Sea level rise, leading to coastal

Degradation and salt water intrusion.

- Coastal areas that comprise a significant economic zone for small islands face the possibility of degradation of fishing areas because of changes in salinity, temperature and sedimentation.

- Many areas used for dalo in Pacific countries are becoming too saline for current varieties and the availability of fresh water for agriculture is being seriously compromised.
- Soil salinity is the salt content in the soil; the process of increasing the salt content is known as salinization.
- **Salinization** as a process can result from:
 - High levels of salt in water.
 - Landscape features that allow salts to become mobile (movement of water table)
 - Climatic trends that favors accumulation.
 - Human activities such as land clearing.

WAYS OF PROMOTING FOOD SECURITY AT HOME

- FOOD SECURITY as defined by the United Nations' Committee on World Food Security, ***means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.***
- Access by all people at all times to enough food for an active, healthy life.

Livestock Farming Domestic Food Preservation

- This includes domesticating or keeping live animals at home for food consumption.
- These animals are looked after by the families and are fed and sheltered
- There include cows, pigs, sheep, goat, chicken and duck
- Access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.

Food preserving is keeping food safe for a longer period of time.

- Different methods such as smoking, freezing, using chemicals such as vinegar, sugar, oil and
- oil, can be used at home to keep food safe for a longer period of time and to ensure that they are
- available when the food is not in season as well as
- to prevent food spoilage

Activity questions

1. 4. The introduction of agriculture in Fiji has been beneficial to the people and the economy. However the effects on the environmental have been destructive. Discuss the effects of the following methods on the environment: (a) Deforestation (b) Use of pesticide
2. Explain how the following changes in weather pattern affect food supply) Intense rainfall b) Rise in sea level c) Severe storms d) Droughts
3. .Define the term Food Security.
4. . Discuss how these factors lead to promoting food security at home) Livestock farming b) Domestic food preservation