

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

School: Penang Sangam High School

Year/Level: 13C

Subject: Geography

Strand	Physical Geography
Sub Strand	Soil
Content Learning Outcome	Highlight soil conservation measures Describe the impact of climate change on soil

Week:10

iii. Alley Cropping

- means planting crops between rows of trees to provide income while the trees mature.



Advantages

- a. Improve soil health – usually a good option in erosion prone areas or degraded shape especially when trees and shrubs rows are planted along contours. Basically for woody roots in the alley cropping systems help reduce soil erosion, increase water infiltration, add organic carbon to the soil, recycle and add nutrients and improve nutrient retention.
- b. Improve crop health – tree and shrub canopies in an alley cropping system protect the inter-crops against wind damage and insect pests, moderate air and soil temperature extremes and reduce moisture loss from the soil. Reducing wind effects also aids in pollination activities and beneficial insects.

iv. Forest Farming

- this is the practice of farming operations that grow food, herbal botanical or decorative.



Advantages

- a. Provide shade levels and habitat that favour growth and enhance production levels.
- b. Provides a range of cultivated systems starting from introducing plants into the understory of a timber stand to modifying forest stands to enhance the marketability.
- c. Focuses on the increasing benefits to the landowner as well as maintaining forest integrity and environmental health.

v. Riparian Forest Buffers

- are natural or re-established areas along rivers and streams made up of trees, shrubs and grasses.



Advantages

- a. These buffers can help filter farm run-off while the roots stabilize the banks of the streams, rivers, lakes and ponds to prevent erosion.
- b. These areas could also support wildlife and provide another source of income.

Activity

1. Differentiate between alley cropping and forest farming.