

PENANG SANGAM HIGH SCHOOL
P.O.BOX 44, RAKIRAKI
YEAR 12 GEOGRAPHY WORKSHEET 6 – WEEK:16,17,18

LESSON NOTES & ACTIVITIES

- Agriculture means the cultivation of plants and animals for human use and purposes.

Strand	Physical Geography
Sub Strand	Agriculture
Content Learning Outcome	Study the factors affecting agricultural systems and practices and how it influences environment protection.
	Evaluate the importance of selecting sustainable agricultural practices in order to have a secured food supply.

- Fiji is an agricultural country and agriculture contributes to more than 19% of the country's GDP.
- It provides the 50% total employment and accounts for 43% of Fiji's foreign exchange earnings.
- The influence of land in Fiji is influenced by the combination of physical factor such as relief and climate and cultural factor relating to the people who work the land.

<u>Physical Factor</u>	<u>Social Factor</u>	<u>Economic Factor</u>
<p>1. <u>The type of land</u> ✓ Flat land will encourage vegetable, dairy farming and mixed farming. ✓ Hill and high country will encourage beef cattle, sheep farming and forestry.</p> <p>2. <u>Climate</u> The amount of sunshine and rainfall received by an area example the Leeward side of Viti Levu which receives more sunshine and less rainfall will encourage sugar cane farming.</p> <p>3. <u>Soil Type</u> Different soil types will encourage different agricultural landuse.</p>	<p>1. skills, experience and knowledge example an Indian farmer is skillful in sugarcane farming while an Itaukei farmer is skillful in planting dalo and yaqona.</p> <p>a. Individual choice or preferences.</p> <p>3. Land ownership and type of land tenure.</p>	<p>1. Market demand prices</p> <p>2. Availability of capital.</p> <p>3. Availability of transport and access to market.</p>

Activity

1. Discuss two physical factors that affects agriculture.

Soil Type

1. Alluvial Soil

Is a dry soil which is found on flat rolling areas. Mainly found in river valleys and flood plains. As the result alluvial soil are fertile. It support sugar cane farming, rice and mixed cropping.

2. Talasiga Soil

Dry soil found in rolling to hilly areas. Is of low fertility due to excessive removable of vegetation. Is a very low agricultural value, therefore support only pine forests , pineapple (with fertilizer)

3. Lateritic soil

Are wet soils found on hilly and mountain area. Is of low fertility due to being heavily leached by heavy rainfall. Support forestry, cocoa, coffee, fruits and extensive pastoralism.

4. Alluvial and colluvial

Wet soil are found on flat to hilly areas. Natural fertilizer is maintained by deposition after flooding and soil creep down the slope. Supports cash farming, example rice, banana, pastoralism, root and vegetable crop.

Type of farming

1. Sugar cane farming

- Is the backbone of Fiji and Fiji's main agricultural produce
- It employs over 22000 direct workers and 20 000 sessional can cutters and 22000 mill workers.

Location

- On the Western part of Viti Levu from the low lying areas of Rakiraki to Sigatoka.
- Northern parts of Vanua Levu from Seaqaqa to Labasa.

Condition Required – rainfall during the planting season and sunshine as the cane matures to provide sweetness in the cane.

Sugar cane mills – Lautoka, Rarawai in Ba, Labasa_

By products

- Are minor or additional products produced in the making of the major product: example, molasses (used for making liquor), mill mud (dried portion of the processed cane)
- Molasses is used by the local distilling companies to make alcohol and spirits. It is also sold to overseas countries for animal feed, alcohol and sprit.

Activity

1. Differentiate between alluvial and colluvial soil. _____

2. Provide reason alluvial and colluvial soil are best soil for agriculture. _____

Importance of Sugar Industry

- Bring in foreign income through export of sugar.

- Provide employment
- Self-sufficient production ensures availability of sugar at low price for domestic consumption.
- Contributes to country GDP
- Leads to local development in the economy example infrastructure, new towns and businesses.
- Major source of income for many farmers helping them to improve their standard of living.
- Through exports Fiji develops friendly links with other countries.

Problems faced by the Industry

- Expiry of land lease
- Natural disaster, like flood, cyclone and drought will damage crops and decrease crop production.
- Milk breakdown
- Burning of cane fields
- Lack of cane fields
- Lack of cane cutters as people prefer white collar job.
- High cost of fertilizer
- Transportation Cost
- Bad Weather conditions like heavy rainfall make harvesting and transportation difficult

Solution to the problem

- Government should ensure land lease are renewed.
- Farms to have proper drainage to avoid flooding.
- Authorities should ensure regular maintenance of machines in factories.
- People caught burning canes should be fined or jailed.
- Hire cane harvester in areas like Lautoka , Ba, Nadi .
- Quality cane payments.
- Government should subsidize the price of fertilizers.

Copra

Location

- South East of Vanua Levu, Taveuni, Rotuma, Kadavu, Lau and Lomaiviti.
- The mills of Fiji Limited is the official body looking after copra production.
- Copra is a non-perishable crop which can be kept for a long period of time. The government has purchased an estate in Mua Northern Taveuni as a research station and Wainiqata Research Station in Savusavu.
- Problem faced: low price for copra , aging palm trees natural disaster damage the trees, high cost of transportation of copra from outer island to the main land.
- Coconut Industry Development Authority (CIDA) located in Savusavu which plants and breeds of coconuts trees.

3. Yaqona

- there is a large market of yaqona in Fiji and abroad. It grows best in well watered and well-drained soil. Yaqona is a good source of income for remote and outer island areas as it is a non-perishable crop.

Yaqona is exported to other countries and the Pacific.

4. Ginger

Location:Lomaivuna , Naitasiri.

It needs weel-drained soil and farmed on slopes. Ginger is used for sold in market for household purposes, makinf lollies and ginger beer, exported to other countries.

5. Pineapple

Location – Western parts of zviti Levu an Korovou.

Soil Type; Tagimocia soil which requires fertilizer, well drained soil.

6. Citrus

In Batiri, Bua and Sigatoka.

7. Vegetable farming

Is done on both small and large scale. Salad bowl of Fiji – Sigatoka and Naduruloulou Research Station and both located in Sigtoka. Koronivia station located in Koronivia, Nausori.

8. Rice Farming

Rice remains a staple food in the country. The irrigation project at Lakena, Navua and Dreketi have contributed to the local production of rice in the past years. Currently, the northern divisions accounts for around 70% of the total rice production. Rice is gown bothe in dry and wet soil for example, Dry rice is grown in dry areas and wet rice grown in wet areas. Areas such as Dreketi, Navua and Rewa.

9. Dalo farming

Dalo farming requires wet weather with flat land. Taveuni is the country's largest producers of dalo, however dalo from Bua could replace Taveuni as the country's major dalo exporter if the commodity production of the island continues to fluctuate. It has been mentioned that the quality of dalo in Bua were better compared to those from Taveuni (the Fiji Times, May 27 2014).

The dalo produced in Bua were bigger size and weight compared to those in Taveuni. This means that Taveuni produces the largest quantity of dalo whereas the province of Bua produces the best quality of dalo in the country. A new dalo packaging station is located in Waimecia , Nalawa in Ra. Other areas of dalo farming are Kadavu, Rewa, Sawani and Naitasiri, Rakiraki and Koro Island.