**Notes**

**5-10 for “Defining Resources and Categorising their Uses”**

1. **Non-renewable Resources**

* Non-renewable resources = non-living (abiotic): minerals, fossil fuels.
* Non-renewable implies a fixed or finite amount, but exact quantities are hard to determine.
* Estimates of resource exhaustion are time and technology dependent.
* Concept of finite resources is crucial to resource management.

1. **Ecosystem Model of Resource Use**

* Fundamental resources: air (atmosphere), water (hydrosphere), and land (lithosphere).
* These resources and solar energy enable photosynthesis, making them life-giving resources.
* Diagram: Ecosystem model showing the interaction of fundamental resources.

1. **Dynamics of Ecosystem Model**

* Increased use of fossil fuels leads to more waste, affecting fundamental resources.
* Example: Sulphur dioxide from fossil fuels combines with water vapour to form acid rain, affecting land and water resources.
* Increased CO2 production contributes to climate change, with potential global impacts.
* Ecosystem model shows the cyclical nature of resource use, highlighting environmental impact as a "cost".

1. **Resource Development Impact and Costs**

* Resource management must consider the entire process of resource development.
* Impact and costs include waste from packaging, industrial effluents, and potential environmental and health effects.
* Questions arise about safe levels of discharge and who bears cleanup costs.
* Environmental repercussions are often not included in production costs, termed "externalities".

1. **Sustainability and Sustainable Development**

* Sustainability: resources should not be exploited to a level that won't be available for future generations.
* Destruction or extinction of species can ruin economies and lifestyles.
* Sustainability recognises ecological relationships, making it challenging to implement, especially with increasing population and resource demand.
* Debate: emphasis on maintaining a standard of living or on ecological processes.

1. **Changing Resource Use**

* Examination of individual resources necessary to British Columbia.
* Resource use changes as societal conditions, technologies, and environmental attitudes change.
* Urbanization in British Columbia has led to new conflicts over resource use.
* Example: Traditional forestry practices conflict with non-timber values like old-growth preservation, wildlife, water quality, and tourism.
* Increasing need for resource management.

**1-6 for “Staples Theory.”**

1. **Development of Canada through Staples**

* Staples theory by Harold Innis describes Canada's development through resource exploitation.
* Theory assumes external demand for these resources.
* Five essential resources: fish, furs, timber, wheat, and minerals, developed in a historical and east-to-west pattern.
* Minerals are an exception to the directional trend, discovered sporadically across regions.

1. **Backward Linkages**

* Backward linkages refer to conditions necessary for resource export.
* Key backward linkage: transportation systems are influencing other economic activities.
* Includes employment from building and running port facilities, warehouses, boat repairs, and loading resources for export.
* Over time, ports connected to canals, railways, and road systems.

1. **Forward Linkages**

* Forward linkage: adding value to resources through processing or manufacturing before export.
* Example: milling raw logs into dimension lumber in British Columbia.
* Higher value added by manufacturing furniture, doors, musical instruments, etc.
* Accumulating backward and forward linkages leads to the growth of major centres.

1. **Final Demand Linkages**

* Final demand linkages: demand for producing goods and services for the local/domestic market.
* As the population increases, thresholds for local production also increase.

1. **Multiplier Effect**

* Accumulation of all linkages = multiplier effect.
* Example: A pulp mill or mine adds workers (forward linkage), stimulating local economy growth (final demand linkages) and possibly enabling the manufacture of pulp or mine machine components (backward links).
* External demand for the resource is crucial; recessions and depressions can reverse the multiplier effect, leading to widespread unemployment.

1. **British Columbia's Dependence on External Demand**

* British Columbia still depends on external demand for its resources.
* Exports of resource-based goods and imports of higher value-added products.
* Staples theory helps assess the effects of various linkages on employment and social benefits.

**Summarise and Questions**

**Summarise:**

"Defining Resources and Categorising Their Uses" explores the concept of resources and their categorisation. Resources are naturally occurring substances that hold value to society, with their function and value being culturally defined. The value of a resource can change over time, as seen in the shift from coal to petroleum, electricity, and natural gas for energy sources. Resources can have multiple values and may be valued differently by different cultural groups. The categorisation of resources includes renewable and non-renewable resources, with renewable resources being living or biotic and requiring proper management to ensure their renewal. Sustainability is a crucial concept, emphasising the responsible use of resources to confirm availability for future generations.

"Staples Theory" discusses the development of Canada based on the exploitation of critical resources or staples. Harold Innis proposed this theory, identifying five significant resources in Canada's development: fish, furs, timber, wheat, and minerals. The approach highlights backwards, forward, and final demand linkages associated with each staple. Backward links involve transportation systems and infrastructure necessary for exporting resources, while forward linkages focus on adding value to resources through processing or manufacturing before export. Final demand linkages refer to the demand for goods and services within the local or domestic market. The multiplier effect shows how the cumulative impact of all links can stimulate economic growth. British Columbia's history of dependence on external demand for resources continues, and the theory provides a framework to understand employment and social impacts.

**Questions:**

1. How does the value of a resource change over time, and what factors contribute to these changes?
2. Explain the concept of sustainability in the context of resource management. Why is it necessary, and what are the challenges in implementing sustainable practices?
3. Discuss the different linkages described in Staples Theory (backwards, forward, and final demand). How do these linkages contribute to the economic development of a region?

One moment while I search the internet...

**Population：**

1. Population Change in British Columbia

• Natural increase: Births outnumber deaths due to lower infant mortality and increased life expectancy (Figure 7.6).

• Immigration: Federal government policy encouraged immigration from Europe and the United States, while Asians and other nonwhites were discouraged. A nonracial, points-based system was introduced in 1967, leading to a more multicultural society. Today, immigration to British Columbia is heavily weighted toward Asian migration (Table 7.8).

• Interprovincial migration: Largely a function of economic conditions, either the "push" of job loss and poor economic prospects or the "pull" of good economic times lures people into or out of the province. Positive net migration resulted from high prices for commodities and construction for the 2010 Olympics (Table 7.9).

2. Projection of BC's Future Population

• Based on past trends in natural increase and net migration, the future population of British Columbia can be projected (Figures 7.7 to 7.9).

• The trend toward an aging population will continue into 2021, with implications for the province, from the health care system to housing and tourism.

3. Projection of BC's Future Regional Population

• The population is projected to increase by approximately one and a half million by 2031, but this increase is not evenly distributed (Table 7.10).

• Regions such as the Lower Mainland are expected to grow more rapidly, while the Kootenays and northern regions are projected to have more modest growth. This reflects the dual economies in the province: the resource-dependent hinterland is expected to grow more slowly than the core, or heartland, which is much more influenced by the service economy.