

CHAPTER 11: THE ATLANTIC ECONOMY

- All the goods and services that you use in a day are related to different types of activity in our economy. These activities are broken into four sectors:
 1. **Primary Industry** which refers to activities in which people *use, extract or harvest* natural resources such as water, soil, fish, animals, plants and trees. Their products are only slightly altered before they are used. Fishing, mining, forestry, and agriculture are all primary industries.
 2. **Secondary industries** process raw materials into finished goods. During this manufacturing, raw materials are processed into products that are substantially different from the original materials. The materials are worthy more in their manufactured form than they were in their unprocessed or raw form. This increase in value is known as **value added**.
 3. **Tertiary industries:** This sector enables consumers to obtain and use the finished goods. Workers in the tertiary sector of the economy provide services rather than goods. Sales, repair services, banking, and insurance are all part of this sector.
 4. **Quaternary Industries:** This sector involves specialized technology. Research scientists and computer software designers are examples of people who work in this sector. Because this sector usually provides services rather than goods, they are often grouped together with tertiary industries.

The above industries combine together to form the Gross Domestic Product (GDP). This is the total value of goods and services within a given area in a given year. This can be given for a province, a region or a country. Economists pay close attention to the GDP, because it indicates whether an economy is growing, staying the same or getting smaller. GDP is measured per capita (this means per person)

Natural resources are the materials found in the natural environment that humans can use to satisfy their needs and wants. A natural material is considered to be a resource only if three conditions are met:

1. Society feels it needs the material
2. Technology is advanced enough to extract or harvest the material
3. It must be economical enough to extract the material and put it to use

For centuries, primary resources have formed the basis of the Atlantic region's economy. However, recently most of the primary resources are becoming depleted – this means used up (as is the case with the fisheries). Others are in decline

because of the changing consumer demand (as is the case with coal mines). Others have suffered because of stiff competition (as is the case with lumbering).

Technology has also made a difference in primary industry. At one time some of these industries required many skilled workers, whereas now machinery has taken over many of these jobs.

The three main industries in New Brunswick that are associated with natural resources are:

1. Forestry
2. Mineral production
3. Farming

Forestry is the most important industry in New Brunswick as it contributes a large percentage of the province's GDP.

Aquaculture or "fish farming" is a popular industry in all Atlantic provinces. This practice helps to replace declining fish stocks. It has proven to be a successful activity in our region

Activity:

Use the maps and legends on pages 160 and 161 and answer these questions:

1. Where are the pulp and paper mills located in our region (Miramichi)? Are these still in operation?
2. What types of farming do we do here and near here?
3. What types of farming are found in New Brunswick?
4. What types of mining are done in New Brunswick?
5. Why is there such a large area of non-agricultural area in New Brunswick?

PRIMARY INDUSTRY

Fishing

The waters of the Atlantic are ideally suited as fish habitat. In these waters, the warm Gulf Stream and the cold Labrador current mix together and attract a large array of fish. Also, the continental shelf off the coast of Atlantic Canada creates good conditions to help microscopic floating plants that form the foundation of a complex food chain that supports fish.

Forests, Farming and Mining

Our forests are consumed by fires, making lumber and making pulp and paper. Our forests provide us with materials we need and they create employment. They produce oxygen, protect the soil from erosion and provide a habitat for birds and other wildlife. They also provide many opportunities for people to enjoy a natural environment.

Mining refers to taking minerals from the earth. These can be **metallic**, **non-metallic**, or **fossil fuels**. We use these minerals to create heavy equipment, heating fuel, household appliances and many more items. We mine using the “open-pit” method or the shaft method.

Farming is a set of activities devoted to producing foods and other products from the land. There are six types of farming in Atlantic Canada;

1. vegetable
2. livestock
3. dairy
4. egg
5. fur
6. mixed farm

Mining at Voisey’s Bay Read pp. 164-165 on

1. Briefly describe what happened at Voisey’s Bay.
Two men were flying over in a helicopter looking for diamonds when they spotted ‘rusty zones.’ They then returned on foot to take samples to see if it was a good place to mine.
2. What kind of minerals did they find?

Results found copper, nickel, cobalt and other precious metals in concentrated amounts.

3. What do you think mining will do to the environment of Voisey's Bay.
Mining has the potential to harm the environment. It is not only the mining, but the processing. It will release chemicals into water & air that can harm wildlife and plant life in the area.

Potato Farming in PEI Read pp.166-167

1. Describe Gordon Sobey's farm.
Gordon Sobey has an 80 hectare farms with another 56 rented hectares. He grows potatoes, wheat, hay, grain, and sows as well as wood for private use. He has himself and one other full-time employee; in the busy season he hires another 4-6.
2. What is crop rotation? What is contour plowing?
Crop rotation is growing one crop on land on which another crop had been grown recently. It is switching crops around your field to help your soil take a break. Contour plowing is plowing along the slopes and not with them to prevent water from running off in heavy rains.
3. Focus on Figure 11.10, question #2.
The measures that we can see to show that Gordon Sobey is trying to protect his farm from wind is the large group of trees in front of his farm. He has left these as a **windbreak**.
4. Figure 11.12 – question
The three items that account for the greatest expense on the Sobey farm are: feed, fertilizer and chemical spray, and depreciation on equipment.

SECONDARY INDUSTRY

1. Name 4 secondary industries.
Four secondary industries are: manufacturing, construction, transportation, utilities
2. There are two types of manufacturing. Name and describe, with an example, each type.
First Stage – processing raw materials; ie: ore from Voisey's Bay
Second Stage – using processed materials to make finished products; ie: using nickel to make stainless steel
3. Question for Fig.11.13

Industries locate in

- places close to highways (**Linkages**),
- close to where they can sell their products (**Markets**),
- where they can be helped by banks & governments and don't have to pay high taxes (**Financing**),
- close to power plants and electricity (**Energy**),
- in places where there are safe neighbourhoods, clean environment, scenery, etc. (**Location**),
- they locate where there are people who can do the jobs they need (**Labour Force**),
- and finally, where they can easily get what they need to make what they make (**Raw Materials**)

Processing Potatoes: Have a French Fry! Read pp.170-172

1. Question for Fig. 11.14 & 11.15

11.14 McCain's located where it did because its close to its Raw Materials (potatoes) and because Florencville is located on a main highway which provides easy access to Canadian suppliers and markets. Also, its close to the border allowing a much larger market.

11.15 This advertisement reflects a relaxed lifestyle, with a cross-section of age groups, all of whom don't have to worry about what's for dinner. The ad suggests that McCain Superfries are a 'fun' food. An advertising executive would work in the quaternary sector of the economy.

2. Do question 1b from p.172

Frozen French fries would have cut costs for many food service operators by eliminating the cost of labour required to peel and cut potatoes by hand. However, not all operators use these products, and home-fries continue to regain popularity.

Secondary industries include:

- Manufacturing – two types of this are first-stage (processing raw materials) and second-stage (using processed materials to make finished products)
- Construction
- Transportation
- Utilities (hydro and gas)

Secondary industries are related to primary industries often being a direct effect of that primary industry; eg: a lumber mill or a canning plant growing out of forestry or fishing industries.

TERTIARY & QUATERNARY INDUSTRY

This sector provides services rather than goods and includes jobs in tourism and hospitality, stockbrokers, business consultants, accountants, nurses, teachers, and many more.

There is sometimes a close link with primary and secondary industries. For example, forestry relies on mechanics and technicians to fix the harvesting machines. Agriculture

- Read p.172
 1. What do these two types of industries provide?
Tertiary and Quaternary industries provide services rather than goods.
- Read p.173
 2. On p.174, do questions 1 a+b
Nutritional labelling is information on the contents of food, including percentages of protein, fat, vitamins, etc.

The nutritional labelling tells you the **units of measurement** used and the **percentage/amount of contents** (ie: protein, carbs, sugar, fat), it gives warnings (ie: ‘Not an excellent source of iron or protein’) and it provides the **serving size**.

2C) From looking at the pie chart created in class, overwhelmingly the Tertiary sector is the most important to the economy of New Brunswick. However, we could not survive without having a primary economy and a secondary economy because you need the products/goods from the first two to provide services in the third sector. Specifically, forestry would be the primary industry that is the most important to New Brunswick. You can't make any of the secondary goods without the original wood. And you wouldn't be able to sell that product, or provide services to the employees of the primary and secondary industry connected to forestry. While one of the smallest sectors of NB's economy, the primary sector is the beginning building block that everything else is built on.

3. On p.174, do 2C (make this paragraph 5-8 sentences in length, it will be assessed)
- Read pp.174-177
4. On p.177, do questions 1, 3 (see sample below), 4a+b

Explorations p.177

Characteristics of the New Economy	How JOT exemplifies them
<i>Main industry:</i> Knowledge based	Depend on a workforce trained in technology who train others in technology, They use tech, software, etc.
<i>Labour Force:</i> Information processors	Use advanced information technology; their students are trained to use these technologies for the workplace
<i>Education:</i> Advanced	Employees need a good academic background; need to be highly qualified and specialized
<i>Literacy:</i> Essential	Employees need to be able to communicate effectively with clients; need written and verbal skills as well as computer literacy
<i>Reliance:</i> Self-reliant	The company started with a contract that provided up-front financing. Their training promotes self-reliance in new workers
<i>Main organizations:</i> Small firms	25-50 employees working on projects
<i>Entrepreneurship:</i> Highly developed	JOT keeps an eye on marketplace, adapts to market conditions and uses broad-based marketing strategies
<i>Labour relations:</i> Cooperative	Ms. Misener recognizes “employees are the most important resource the company has.” Rely on teamwork to remain successful
<i>Number of industries:</i> Many	Serves many industries; constantly looks for needs and how to fill them.
<i>Technology:</i> Rapid change; merging fields	JOT employees use the latest technologies to provide different types of service; train in latest tech

Explorations p.176 #2.

Important Differences Between the Old and New Economy

- ***Main Industries*** – The shift is away from purely resource-based industry to wiser use and development of resources, including human resources (knowledge & skills) required to bring about this shift.
- ***Education levels*** – The workplace now requires a much higher education level, including literacy, to keep pace with rate of technological change and allow workers to adapt to change.
- ***Marketplace*** – more and more companies are competing in a global marketplace as trade barriers come down and domestic products are replaced by cheaper alternatives from other nations
- ***Nature of Skills*** – the need for manual skills has been replaced largely by a need for technical skill as machines do more and more jobs once done by people