



Chapter 1

First phase of industrialization



What is industrialization?





Question of the day: What
major changes did
industrialization bring to
Quebec and Canada?



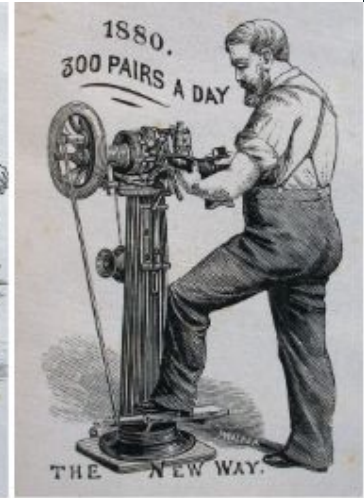
Division of labour

Industrialization brought about major changes in the way work was organized

In the past, workers would apprentice to learn a craft from a teacher in exchange for food and lodging. Now they were paid an hourly wage to perform a simple and repetitive task.

For example, in the 1850s, shoes could be mass produced. Each worker performs one small step of the production process and were paid very little. This new way of dividing labor being divided. It increased productivity

Eventually machines also increased productivity by replacing human power with machine power.

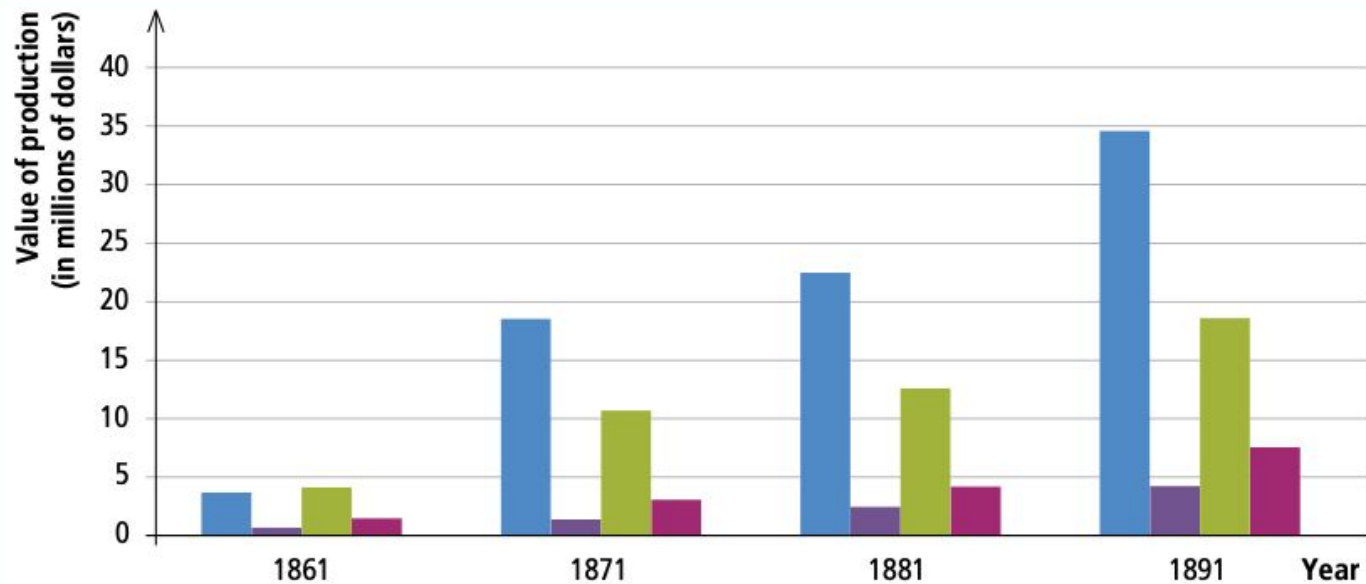


Mechanization

Mechanization made it possible to produce a lot more in a short amount of time.



36 The growth of certain production sectors, 1861–1891



Legend

- Food
- Textiles
- Lumber
- Iron and steel

Data from: Jean Hamelin and Yves Roby, *Histoire économique du Québec 1851–1896*, 1971.

Production sectors

A large workforce, low wages and the expansion of transportation networks all contributed to industrial development. Industrial activity was **concentrated in cities**- beginning in Montreal, Canada's main financial centre and then extending to the areas around Montreal, the city of Quebec and the Eastern Townships

The **first phase of industrialization was tied to sectors in light industry and the manufacturing industry who produced consumer goods**

This was followed by the development of **heavy industry**-sectors that involved complex transformation processes to produce iron steel and railway materials

During this time, the timber industry remained a staple in Quebec's economy. **Most industrial activity produced goods for Canada's market which increased due to infrastructure and the new provinces**

1.58 DOLLAR VALUE OF QUÉBEC
MANUFACTURING BETWEEN
1851 AND 1901

1851	0.6 million
1861	15 million
1871	77 million
1881	104 million
1891	153 million
1901	154 million

Jean Hamelin and Yves Roby, *Histoire économique du Québec, 1851-1896*, Montréal, Fides, 1971, p. 267.

1.59 INDUSTRIAL SECTORS DURING THE FIRST PHASE OF INDUSTRIALIZATION IN QUÉBEC AT THE END OF THE 19TH CENTURY

LIGHT INDUSTRY	
FOOD	• Highest production value • Located mainly in Montréal: mills (flour), sugar refinement and production of canned goods. In surrounding areas: cheese and butter production
LEATHER AND SHOES	• Dominant industry in the first decades of industrialization • Concentrated in Montréal and the city of Québec
CLOTHING AND TEXTILES	• Typically low-paid workforce; mainly women and children • Concentrated in the Montréal area as well as in Salaberry-de-Valleyfield, Chambly, Saint-Hyacinthe and Sherbrooke
TOBACCO	• Production and transformation of tobacco into cigarettes and by-products • Located in Montréal and Joliette
HEAVY INDUSTRY	
IRON AND STEEL	• Sector tied to railway industry (locomotives, railcars, rails, etc.) and construction of steam engines, hardware, pipes, stoves, etc. • Located mainly in Montréal
TIMBER INDUSTRY	
SAWMILLS	• Key sector throughout the 19th century in terms of production value and number of jobs • Boom in processing industries: doors and windows, barrels, matches, furniture and shipbuilding • Large sawmills located along St. Lawrence River tributaries. Many newly settled cities and regions depended on this industry, including Hull, Chicoutimi and Rivière-du-Loup.
PULP AND PAPER	• Emerged at the end of the 19th century

Industrial capitalism

In the 19th century, industrial capitalism was born: Industrialization driven by the capitalist **quest for profit.**

- Entrepreneurs had accumulated capital through trade and **hired a large number of employees to work in factories to manufacture goods at a low cost.**
- The expanded workforce and mechanization increased productivity and profits for owners
- They used the extra capital to invest in the new means of production required to develop their industries and create new ones



Industrial capitalism

A lot of the capital required for the first phase of industrialization was provided by the UK and **Montreal's Anglo-scottish industrial bourgeoisie who controlled financial institutions** like the Bank of Montreal and the Molson Bank

French Canadians invested any capital they had in real estate or in starting small retail businesses.



Transportation networks in Eastern Canada

The increase in trade created a need for efficient transportation infrastructure in Canada

- **Canals and then railways allowed for faster transportation which boosted industrialization**

To finance these large scale infrastructures, governments worked closely with the business community, with a goal of reducing the cost of transportation so they could compete with the American transportation network

- The American network was more advanced and threatened to divert trade away from Canada



1.54 View of Montréal's working-class neighbourhoods along the Lachine Canal, the cradle of industrialization, circa 1896.

Canals and ports

Beginning in the 1820s, many new canals were built including the Lachine Canal which allowed ships to bypass the rapids at Montreal and the Rideau Canal which connected Ottawa and Kingston

Following the act of Union, the Province of Canada extended this network by adding new canals along the St. Lawrence River between Montreal and Kingston

- Between 1852 and 1888, a channel was dredged between Trois-Rivières and Montreal so ships could travel up river to the Port of Montreal-Canada's busiest port at this time
- Docks were also built at the port to improve facilities and increase the port activity



Railways

Railways and canals served to connect cities and facilitate trade

- Railways were more flexible since they could be used year round and did not freeze

The first Canadian railway line connected La prairie and Saint-Jean which was completed in 1836

In 1853, a railway was made between Montreal and Portland, Maine. In 1856, the Grand Trunk railway Company built a railway connecting Montreal and Toronto

In 1859, it was expanded once again to cities like Sarnia and Riviere du loup

The victoria bridge was built in 1860 in order to connect Montreal to the Grand Trunk Railway Network.



1.55 Completed in 1860, the Victoria Bridge connected Montréal to the Grand Trunk Railway network, which extended all the way to Portland, Maine. Nearly three kilometres long, the project was an engineering marvel, and, at the time, was the longest train bridge ever built.



Railways

After Canadian Confederation in 1867, the Intercolonial Railway extended the Grand Trunk line to the Port of Halifax passing through New Brunswick and Nova Scotia

In 1885, the first transcontinental railway connected Eastern Canada to Vancouver in the west

1.56

MAIN NAVIGABLE CANALS AND RAILWAYS IN EASTERN CANADA, CIRCA 1890



43

The Intercolonial Railway close to the village of Bic in the Bas-Saint-Laurent, circa 1875



The Intercolonial Railway began in the Maritimes, cut through the Vallée de la Matapédia and then ran along the Fleuve Saint-Laurent to connect with the Grand Trunk in Fraserville, now called Rivière-du-Loup.



The development of transportation stimulated the economy. It became easier, faster and safer to transport goods from one place to another, lowering the cost of distribution. The canals and making of railroad tracks required raw materials which led to the development of forestry and metallurgy industries.



How important was the forest industry?

Since the beginning of the 19th century, the forest industry formed the basis of trade in Canada. It continued to transform the region and helped the economy grow



Sawmill industry

In **1846**, the UK eliminated preferential tariffs and replaced it with free trade.

Why would this impact Canada?

Since Canadian timber could not compete with Northern Europe, timber sales to the UK were declining.

The American market opened up when the Reciprocity treaty was signed in 1854.

- Railways and canals were built which aided transportation



1.63 A load of square timber on a docked ship in the Port of Québec, circa 1872.

Sawmill industry

There was a demand in the USA for Canadian **sawn lumber to build homes in the city due to urbanization.**

- This led to exports to the USA increasing and in 1880 they exceeded exports to the UK

Urbanization in Canada also led to an increased demand for lumber in the domestic market as well.

Where is the domestic market? Why was there a demand for lumber?



Sawmill industry

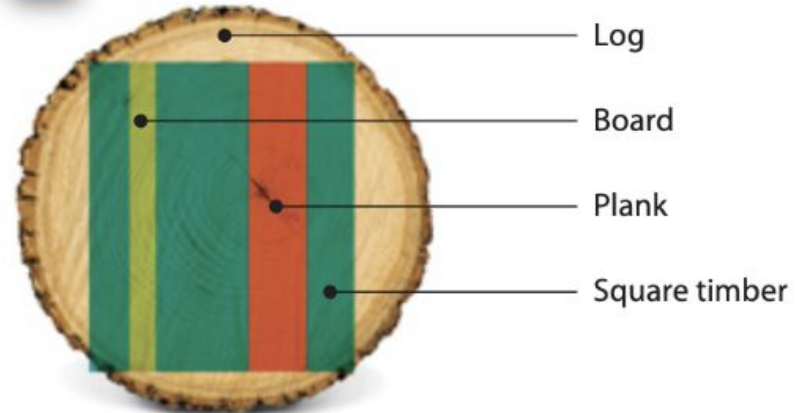
In the 1840s and 1850s, the forest industry in Lower Canada produced a lot of square timber and logs for ship masts for export to the UK

When the American market began to pick up and there were advancements in housing construction (light timber framing and industrial nails), the production of sawn lumber increased and passed square timber production in the 1860s



1.64

CROSS-SECTION OF THE MAIN WOOD PRODUCTS



Sawmill industry

American and Canadian timber producers began to invest in sawmills

- They were being set up all over rural Quebec and provided a steady supply of wood from logging camps

Technical advances such as water turbines, steam engines, and circular, horizontal, and vertical saws increased productivity

The most popular lumber was made of white pine and spruce



1.65 A sawmill in Louiseville, Mauricie, at the end of the 19th century.

Other forest industry products

Hemlock bark was added to the forest industry at this time. Hemlock bark was used in firewood and tanning animal hides

Settlers also sold potash to supplement their income. This is a component of wood ash that was used to make soap

Shipyards around the city of Quebec developed and produced many sailboats

At the end of the 19th century, pulp and paper mills were built along waterways especially in Mauricie, Outaouais and the Eastern Townships



1.66 A load of white pine trunks. White pine became scarce in Québec at the end of the 19th century.

Areas of development

The first logging regions continued to be developed. This included Outaouais, Mauricie and Saguenay.

- These regions became more colonized as new logging access roads were created

The logging industry was also expanding in Bas-Saint-Laurent and Gaspé

Around 1870, settlers began to colonize the Laurentians and Lac-Saint-Jean

- They cleared forests and sold wood to local sawmills to make money

Overtime this created a farm-forest economy where settlers would log and farm in order to make enough money



1.67 A logging camp at the end of 19th century where trees were cut to make sawn lumber and firewood. At the time, trees were cut by hand, using a wide variety of axes and saws. The forest industry relied on human and animal power—particularly horsepower.

Québec



48 The life of a logger

This document describes the working conditions in a logging camp.

“The provisions that will be supplied for the camps will be bread, biscuits, lard, fish and peas. I hope that everyone will be happy with this food. I promised no more than this. Any man who disobeys orders or does not perform satisfactorily will be immediately dismissed and will not receive one cent of his wages, given that he will have failed to fulfill the conditions of his employment. . . . The workday will run from daybreak to nightfall.”

Excerpt from a letter from Peter McCleod to Damas Boulanger,
December 3, 1846 [translation].

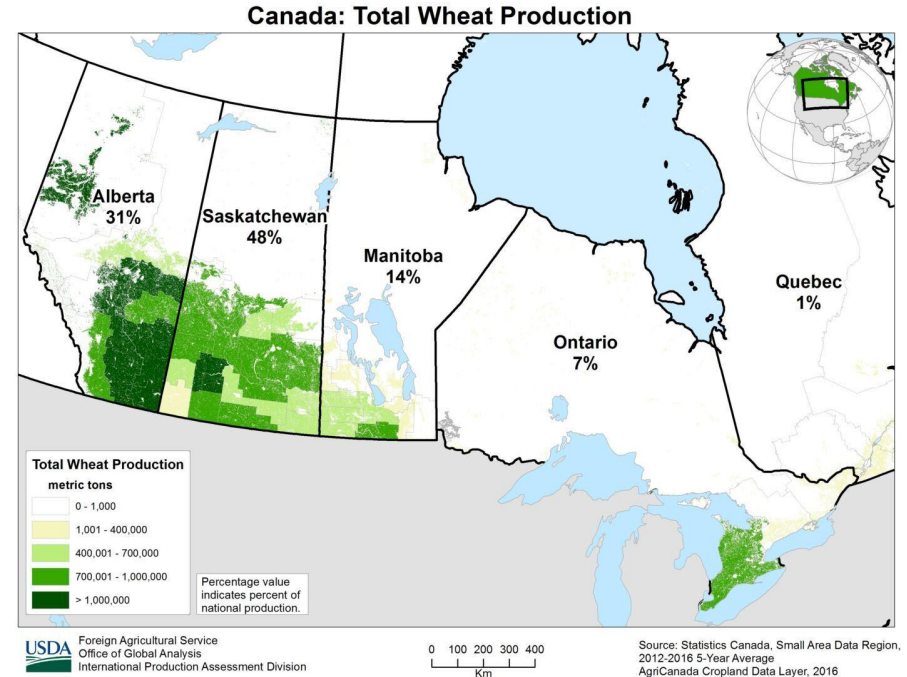
Farming changes

In the second half of the 19th century, Quebec farming progressed greatly due to improved production techniques and a shift towards crops besides wheat

- Since the 1830s, **wheat producers in Lower Canada were struggling to compete with Upper Canada and later western Canada**

In the 1850s, wheat production began to decline in favour of other crops

Market driven production replaced subsistence agriculture



Dairy production

Beginning in 1870s, **dairy production became a popular option for farmers**

- Butter and cheese factories had started opening throughout the region

Organizations like the société de production laitière (1882) worked to promote and develop the dairy industry

1.68

BUTTER AND CHEESE FACTORIES IN QUÉBEC AT THE END OF THE 19TH CENTURY

YEAR	NUMBER OF ESTABLISHMENTS	VALUE OF PRODUCTION (\$)
1871	25	124 000
1881	162	864 000
1891	728	2 919 000
1901	1992	12 876 000

Seigneurial rights What territorial change occurred?

Since the British conquest (**What year did this happen?**) the seigneurial system was seen as outdated.

- There were still areas that were divided into seigneuries.

In **1854**, the Province of Canada passed the *Act for the Abolition of Feudal Rights and Duties in Lower Canada* which abolished the seigneurial system and allowed farmer tenants to purchase their section of land and become property owners



1.70 Animal-powered threshing machine toward the end of the 19th century.

Mechanization

The government of Quebec supported and promoted the modernization of agriculture by issuing publications and creating agricultural organizations

- In 1859, Quebec opened its first permanent agricultural school in St Anne de la Pocatiere.
- Model farmers were set up across the province and farming techniques were improved

Iron began to replace wood and farmers gained access to more efficient farming tools like mowers, threshers and harvesters

Larger machines became steampowered

As agriculture became more mechanized, production and profits increased



Explain how the dairy industry contributed to the development of rural Lower Canada in the 1850s and 1860s. In your answer, specify and connect the following points:

- A problem facing Lower Canada's agricultural production
 - Farmers' response
 - Modernization of rural Lower Canada
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Wheat production in Lower Canada was suffering due to competition from Upper Canada (problem facing Lower Canada's agricultural production). This pushed farmers to turn to dairy farming (farmers' response). The growth of the dairy industry led to the use of new, mechanized farming technology and the mechanization of agriculture (modernization of rural Lower Canada).