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CANADA  
DEPARTMENT OF TRADE AND COMMERCE  
DOMINION BUREAU OF STATISTICS  
CENSUS OF INDUSTRY  
GENERAL MANUFACTURES BRANCH

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REVISED REPORT

ON THE  
SUGAR INDUSTRY

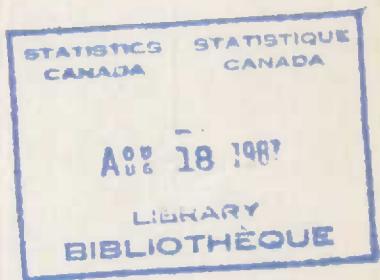
IN

CANADA

1941



OTTAWA  
1943



Price 25 cents



DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

GENERAL MANUFACTURES BRANCH

OTTAWA - CANADA

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THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

REVISED REPORT

The output of the sugar refining industry increased by 69,945,878 pounds during 1941. The production of sugar of all kinds amounted to 1,226,753,068 pounds (1,010,873,797 pounds made from cane and 215,879,271 pounds from beets). The production of cane sugar increased by 67,669,118 pounds and that of beet sugar by 2,276,760 pounds. Granulated sugar comprises over 85 per cent of the total sugar produced.

A new plant producing beet sugar, viz., the Manitoba Sugar Co., came into production in 1940. As a result of this, the output of beet sugar rose from 213,602,511 pounds in 1940 to 215,879,271 pounds in 1941. In 1940, the percentage of beet sugar to the total produced was 18.5, the highest since the inception of the annual census of manufactures in 1917, but this declined to 17.6 in 1941.

Prices of refined sugar at the factory were slightly higher in 1941 than in the previous year. Sugar of all kinds rose from 4.84 cents per pound to 4.95 cents. Granulated sugar rose from 4.87 cents to 4.98 cents, yellow sugar from 4.42 cents to 4.44 cents, while icing sugar rose from 5.43 cents to 5.56 cents.

The refineries operating in 1941 were located as follows: Nova Scotia, 1; New Brunswick, 1; Quebec, 2; Ontario, 3; Manitoba, 1; Alberta, 2 and British Columbia, 1. These eleven refineries in 1941 reported a capital investment of \$43,915,168 and a gross value of production of \$62,402,709. They employed 2,642 persons who received \$3,834,639 in salaries and wages, and paid out \$46,067,190 for raw materials.

Detailed statistics of production, capital invested, materials used, employment, etc., are given in the tables following. In order that there may be no disclosure of statistical information of individual plants, the statistics are given for the Dominion only.

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

Table 1. - Principal Statistics of the Sugar Refining Industry,  
Representative Years, 1917 - 1941.

Year	Refineries Reporting	Capital Invested	Fm- ployees	Salaries and Wages	Cost of Materials Used	Gross value x of Production
	No.	\$	No.	\$	\$	\$
1917 ...	8	31,818,133	2,527	2,324,828	53,179,911	61,429,787
1919 ...	8	38,725,542	3,491	4,177,894	86,308,204	102,630,086
1920 ...	8	46,719,034	3,118	4,632,814	103,689,088	119,086,731
1925 ...	8	50,089,717	2,784	3,828,442	54,457,385	68,445,879
1929 ...	8	43,534,113	2,325	3,686,037	35,640,121	47,151,960
1933 ...	8	35,758,074	2,092	3,048,817	22,846,473	37,189,960
1934 ...	8	33,151,249	2,080	2,919,662	24,099,994	36,007,208
1935 ...	8	33,017,874	2,134	3,086,691	25,137,568	36,597,997
1936 ...	10	32,199,993	2,559	3,413,698	27,924,998	40,405,377
1937 ...	10	35,412,781	2,332	3,318,861	29,012,057	40,916,044
1938 ...	10	36,347,866	2,318	3,315,633	28,838,685	41,392,096
1939 ...	10	40,511,884	2,399	3,467,367	33,728,967	49,896,763
1940 ...	11	42,966,073	2,538	3,623,661	42,150,263	57,274,122
1941 ...	11	43,915,168	2,642	3,834,639	46,067,190	62,402,709

x Selling value at the factory. Statistics since 1933 do not include excise taxes.

Table 2. - Comparison of Principal Statistics, 1940 and 1941.

Items		1940	1941	+ Increase - Decrease
Refineries reporting .....	No.	11	11	-
Capital invested .....	\$	42,966,073	43,915,168	+ 949,095
Employees on salaries -				
Total .....	No.	501	476	- 25
Male .....	No.	420	378	- 42
Female .....	No.	81	98	+ 17
Total salaries .....	\$	1,179,056	1,187,467	+ 8,411
Employees on wages -(monthly average)				
Total .....	No.	2,037	2,166	+ 129
Male .....	No.	1,929	2,043	+ 114
Female .....	No.	108	123	+ 15
Total wages .....	\$	2,444,605	2,647,172	+ 202,567
Cost of fuel and electricity	\$	1,325,479	1,487,848	+ 162,369
Cost of materials used .....	\$	42,150,263	46,067,190	+ 3,916,927
Gross value of production ...	\$	57,274,122	62,402,709	+ 5,128,587
Value added by manufacture x	\$	13,798,380	14,847,671	+ 1,049,291

x Gross value of products less cost of materials, fuel and electricity.

NOTE: Profits or losses cannot be estimated from census figures as no data are collected for certain expense items such as interest, rent, depreciation, taxes, insurance, advertising, etc.

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

Production in Sugar Refineries

Table 3 gives the production of sugar and its by-products by class, quantity and selling value at the refinery for the years 1940 and 1941. The quantity of sugars produced in Canadian refineries during 1941 was greater than that of 1940 by 69,945,878 pounds and the selling value was greater by \$4,722,065. The quantity of beet sugar increased by 2,276,760 pounds and cane sugar by 67,669,118 pounds, making the increase as stated above. Molasses decreased in quantity but shows an increase in value. Of the eleven refineries reporting, two had a value of production of under two million dollars, four a production of between two and five million and five a production of over five million dollars.

Table 3. - Sugar and By-Products

Products	1940		1941	
	Quantity	Selling	Quantity	Selling
		Value at Factory		Value at Factory
	Pounds	\$	Pounds	\$
Sugar - Made from cane .....	943,204,679	45,180,855	1,010,873,797	49,116,760
Made from beet .....	213,602,511	10,853,665	215,879,271	11,639,825
Total .....	1,156,807,190	56,034,520	1,226,753,068	60,756,585
Granulated .....	995,612,184	48,474,608	1,047,750,817	52,216,773
Yellow or Brown .....	122,714,595	5,425,908	132,674,842	5,894,980
Pulverized or icing .....	30,753,491	1,671,080	36,199,630	2,012,312
Fruit .....	3,424,872	182,157	3,935,471	217,191
Loaf .....	4,302,042	280,767	6,192,308	415,329
Syrups (not including molasses) .....	4,958,412	162,949	5,748,097	183,555
Molasses - Made from cane .....	15,820,784	149,889	19,854,719	233,551
Made from beet .....	59,102,750	419,108	53,656,627	494,502
Total .....	74,923,534	541,862	73,511,346	728,053
Beet pulp, wet and dried .....	212,516,000	452,661	206,268,000	664,382
Other products .....	-	54,995	-	70,134
TOTAL VALUE OF PRODUCTS .....	-	57,274,122	-	62,402,709

<sup>1</sup> This does not include excise taxes.

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

Production of Sugar Beets and Beetroot Sugar

The number of acres of sugar beets harvested, the total yield and average yield per acre and the total value of the crop delivered at the factory are shown in Table 4 for the years 1918 to 1941. Acreage of sugar beets harvested decreased by 13,623 acres, the total yield by 116,728 tons and the total value of the crop by \$241,519.

Table 4. - Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar Compared, 1918 to 1941.

Year	Acres Grown	Yield		Total Value	Average Price Per Ton	Production and Value (at the refinery) of refined beetroot sugar		
		Total Yield No.	Per Acre Tons			Lb.	\$	\$ cts. per Cwt.
1918	18,000	294,000	11.25	2,593,715	12.71	50,092,835	4,358,077	8.70
1919	18,600	180,000	9.50	2,630,027	14.61	37,839,271	3,924,411	10.40
1920	34,491	343,000	9.94	5,307,243	15.47	89,280,719	12,856,424	14.40
1921	25,535	199,324	7.80	1,974,384	9.90	52,862,377	3,554,203	6.70
1922	14,955	127,807	8.55	966,521	7.56	29,911,770	1,645,885	5.50
1923	17,941	159,200	8.87	1,922,668	12.08	39,423,160	3,745,200	9.50
1924	31,111	295,177	9.50	1,704,791	5.78	85,770,709	6,192,645	7.30
1925	34,803	370,047	10.63	2,688,302	7.27	72,819,919	5,206,624	7.15
1926	30,073	267,754	8.90	2,286,761	8.54	70,388,105	4,269,076	6.06
1927	25,961	206,713	7.96	2,012,134	9.73	60,969,131	3,719,117	6.10
1928	34,323	244,930	7.14	2,041,465	8.33	64,653,348	3,340,571	5.17
1929	32,556	235,465	7.23	2,080,996	8.84	69,399,213	3,335,344	4.81
1930	40,532	397,576	9.81	3,278,625	8.25	94,624,701	4,529,944	4.79
1931	43,337	435,992	10.06	3,190,198	7.32	107,139,129	4,794,551	4.48
1932	44,817	505,671	11.28	3,113,942	6.16	132,016,859	5,789,205	4.38
1933	43,807	442,391	10.10	2,790,928	6.31	131,392,501	5,713,181	4.35
1934	38,495	412,672	10.72	2,599,982	6.30	114,092,950	4,714,624	4.14
1935	51,985	459,223	8.83	2,881,098	6.27	119,857,668	4,617,733	3.85
1936	x50,444	555,969	11.02	3,510,922	6.31	156,066,242	6,103,264	3.91
1937	x43,758	422,152	9.65	2,825,006	6.69	120,440,235	5,230,971	4.34
1938	x45,194	498,102	11.02	3,403,635	6.83	143,013,847	6,001,380	4.20
1939	x57,316	586,444	10.23	4,417,372	7.53	169,320,343	8,063,332	4.76
1940	x77,548	825,344	10.64	6,922,670	7.30	213,602,511	10,853,665	5.08
1941	x63,925	708,616	11.08	5,781,151	8.16	215,879,271	11,639,825	5.39

\* This is the number of acres harvested. The acreage seeded is slightly higher than these figures, being 82,270 acres in 1940 and 70,803 acres in 1941.

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

Table 5. - Wholesale Prices of Sugar at Montreal and Vancouver for Specified Months, 1940 and 1941.

(Compiled by the Internal Trade Branch)

	Sugar at Montreal				Sugar at Vancouver			
	Sugar, Granulated Standard, per Cwt.		Sugar No. 1 Light Yellow per Cwt.	Sugar Granulated f.o.b. Factory	Sugar No. 3 Yellow per Cwt.		f.o.b. Factory	
	1940	1941	1940	1941	1940	1941	1940	1941
	\$	\$	\$	\$	\$	\$	\$	\$
January ..	5.56	5.89	5.28	5.61	5.46	5.82	5.13	5.49
April ....	5.56	6.89	5.28	6.61	5.46	6.85	5.13	6.52
July .....	5.89	6.89	5.61	6.61	5.80	6.84	5.47	6.51
October ..	5.89	6.89	5.61	6.61	5.80	6.84	5.47	6.51

Materials Used

The cost of materials used in the industry during 1941, as shown in Table 6, amounted to \$46,067,190. This is an increase from the previous year of \$3,916,927. Raw materials, consisting of raw cane and sugar beets, constitute over 92 per cent of the total cost, other materials almost 2 per cent, and containers of all kinds almost 5 per cent. The average cost price of raw cane sugar laid down at the factory was \$3.43 per hundredweight in 1940 and \$3.54 per hundredweight in 1941. The cost at the factory of sugar beets was \$7.30 per ton in 1940 and \$8.16 in 1941.

Table 6. - Materials Used

Kinds of Materials	Unit of Measure	1940		1941	
		Quantity	Cost Value at the Refinery	Quantity	Cost Value at the Refinery
Raw cane sugar .....	Pound	975,460,926	33,461,803	1,046,709,658	37,084,667
Sugar beets .....	Ton	825,344	6,022,670	708,616	5,781,151
Cornstarch .....	Pound	1,104,950	53,270	1,212,276	65,146
Boneblack .....	"	1,966,441	81,706	2,668,294	133,620
Vegetable char .....	"	347,974	39,705	417,661	47,864
Infusorial earth .....	"	4,984,362	112,369	5,333,131	133,129
Lime .....	"	915,711	4,897	987,785	6,049
Limestone .....	Ton	47,648	145,226	40,207	102,033
Sulphur .....	Pound	334,510	8,494	294,801	6,877
Acids (sulphuric, hydrochloric, muriatic and phosphoric) .....	"	1,047,027	31,142	1,095,165	35,946
Soda ash .....	"	234,087	5,206	225,721	4,924
Filtering materials, n.e.s. .....	-	-	15,491	-	20,370
Other chemical materials .....	-	-	27,691	-	127,856
Containers (boxes, bags, etc.) .....	-	-	1,862,925	-	2,331,806
All other materials and supplies .....	-	-	271,608	-	185,752
<b>TOTAL COST OF MATERIALS USED .....</b>	<b>-</b>	<b>-</b>	<b>42,150,263</b>	<b>-</b>	<b>46,067,190</b>

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

Capital Invested

Table 7. - Capital Invested in the Sugar Industry

Items of Capital	1940	1941
	\$	\$
Fixed Capital -		
Present value of land, buildings, fixtures, Machinery, tools, etc. ....	20,837,105	18,204,176
Working Capital -		
Inventory value of materials on hand, stocks in process, fuel and miscellaneous supplies on hand .....)	16,119,355	4,928,539
Inventory value of finished products on hand)		13,148,345
Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.) .....	6,009,613	7,634,108
TOTAL CAPITAL INVESTED .....	42,966,073	43,915,168

Employment Statistics

Employment statistics are given in Tables 8, 9 and 10. Wage-earners in 1941 numbered 2,043 males and 123 females, with a payroll of \$2,647,172 while salaried employees numbered 378 males and 92 females, with salaries totalling \$1,187,467. Compared with 1940 there was an increase of 10% in the number of persons employed and \$210,978 in the salaries and wages paid. The maximum employment of wage-earners was reached in October with a total of 3,561 and the minimum in March with a total of 1,626.

The following employment figures illustrate the degree of large scale production obtaining in this industry. The average employment per factory for the industry as a whole was 231 in 1940 and 240 in 1941. Six of the eleven factories employed between 100 and 300 persons (average 182), three employed between 300 and 400 persons (average 355), one employed less than one hundred and one over four hundred.

Table 8. - Employment for Canada by Number, Sex and Remuneration.

Year	Salaried Employees			Wage-earners (Monthly Averages)			Total Employees Salaries and Wages		
	Male	Female	Total Salaries	Male	Female	Total Wages	Male	Female	Salaries and Wages
	No.	No.	\$	No.	No.	\$	No.	No.	\$
1936	345	63	1,169,529	2,064	87	2,244,169	2,409	150	3,413,698
1937	349	65	1,181,584	1,829	89	2,127,277	2,178	154	3,318,861
1938	364	61	1,163,988	1,809	84	2,151,645	2,173	145	3,315,633
1939	346	60	1,187,767	1,828	105	2,279,600	2,234	165	3,467,367
1940	420	81	1,179,056	1,929	108	2,444,605	2,349	189	3,623,661
1941	378	98	1,187,467	2,043	123	2,647,172	2,421	221	3,834,639

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

Table 9. - Number of Wage-earners Employed by Months and Sex.

Months	1940		1941	
	Male	Female	Male	Female
January .....	1,435	71	1,717	91
February .....	1,220	62	1,569	115
March .....	1,394	63	1,508	118
April .....	1,697	120	1,587	86
May .....	1,842	116	1,778	136
June .....	1,491	122	1,902	135
July .....	1,737	118	1,802	123
August .....	1,596	110	1,904	137
September .....	2,412	142	2,434	132
October .....	3,363	136	3,427	134
November .....	3,088	127	3,212	153
December .....	1,868	105	1,685	118
Monthly Average .....	1,929	108	2,043	123

Table 10. - Average Weekly Earnings and Number of Wage-earners in the Month of Highest Employment with their Regular Hours of Work.

Number of Hours Worked per Week	1940		1941	
	Number of Employees	Number of Employees	Number of Employees	Number of Employees
	Male	Female	Male	Female
30 hours or less .....	212	7	215	10
31 - 43 hours .....	374	46	452	63
44 hours .....	39	57	29	34
45 - 47 hours .....	123	2	146	7
48 hours .....	880	21	499	9
49 - 50 hours .....	110	-	147	14
51 - 54 hours .....	189	-	194	3
55 hours .....	43	-	71	3
56 - 64 hours .....	651	5	844	24
65 hours and over .....	925	-	1,006	-
AVERAGE HOURS PER WEEK .....	53.6	41.9	54.1	43.6
AVERAGE WEEKLY EARNINGS .....	\$24.60	\$12.28	\$25.89	\$13.24

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

Table 11. - Power Equipment

Classes of Power	1940		1941	
	Number of Units	Manufacturers' Rating of Horse-power Capacity	Number of Units	Manufacturers' Rating of Horse-power Capacity
<b>Steam engines and turbines -</b>				
In use .....	34	15,268	37	16,078
Idle .....	3	790	3	790
<b>Gasoline, gas and oil engines -</b>				
In use .....	18	180	30	791
Idle .....	-	-	3	45
<b>Electric motors operated by purchased power -</b>				
In use .....	628	7,474	632	8,085
Idle .....	58	2,248	64	1,814
<b>TOTAL POWER AVAILABLE FOR MANUFACTURING .....</b>				
	741	25,960	769	27,603
<b>Electric motors operated by power generated by the establishment -</b>				
In use .....	1,603	14,497	1,717	15,507
Idle .....	35	493	109	1,181
<b>Stationary boilers -</b>				
In use ....	65	31,712	67	31,232
Idle .....	2	650	2	650

Table 12. - Consumption of Fuel and Electricity.

Kinds of Fuel	Unit of Measure	1940		1941	
		Quantity	Cost Value	Quantity	Cost Value
Bituminous Coal, Canadian	Ton	92,265	\$ 459,562	72,567	\$ 377,026
" " Imported	Ton	58,020	316,365	77,007	500,829
Lignite Coal .....	"	59,949	128,194	55,569	122,448
Coke .....	"	4,296	39,566	3,279	36,186
Gasoline (x) .....	Imp. Gal.	41,380	9,220	33,805	9,016
Fuel Oil .....	" "	7,363,589	269,093	7,651,212	333,913
Kerosene or coal oil ....	" "	346	53	1,724	441
Gas (Manufactured ..	M cu.ft.	1,378	1,475	1,508	1,596
Gas (Natural .....	" " "	-	-	18,009	1,269
TOTAL COST OF FUEL ....	-	-	1,223,528	-	1,382,724
Electricity purchased (including service charges)	Kw.H.	13,238,024	101,951	13,771,006	105,124
TOTAL COST OF FUEL AND ELECTRICITY .....	-	-	1,325,479	-	1,487,848

(x) Includes gasoline used in cars and trucks.

THE SUGAR REFINING INDUSTRY IN CANADA, 1941.

List of Sugar Refineries Operating in 1941.

NOVA SCOTIA

(1) Acadia Sugar Refining Company, Limited, Dartmouth

NEW BRUNSWICK

(1) Atlantic Sugar Refineries, Limited Saint John

QUEBEC

(1) Canada & Dominion Sugar Company, Ltd. 1410 Montmorency St., Montreal.  
(1) St. Lawrence Sugar Refineries, Ltd. 4026 Notre Dame St.E., Montreal.

ONTARIO

(1) Beamish Sugar Refineries, Ltd. 587 Fleet Street, Tercent  
(2) Canada & Dominion Sugar Co., Ltd. Chatham  
(2) Canada & Dominion Sugar Co., Ltd. Wallaceburg

MANITOBA

(2) The Manitoba Sugar Company, Limited (Fort Garry) Winnipeg

ALBERTA

(2) Canadian Sugar Factories, Limited Raymond  
(2) Canadian Sugar Factories, Limited Picture Butte

BRITISH COLUMBIA

(1) The British Columbia Sugar Refining Company, Limited Rogers Street, Vancouver

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(1) Make cane sugar only.

(2) Make beet sugar only.

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