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

REPORT
ON THE
SUGAR INDUSTRY
IN
CANADA



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DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
GENERAL MANUFACTURES BRANCH
OTTAWA - CANADA

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THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Statistics of the sugar refining industry in Canada for the year 1935 are presented in this report. The refineries operating during the year were located as follows: - Ontario two, (Chatham and Wallaceburg), Quebec two, (both in Montreal), New Brunswick one, (Saint John), Nova Scotia one, (Dartmouth), Alberta one, (Raymond), and British Columbia one, (Vancouver). These eight sugar refineries in 1935 reported a capital investment of \$33,017,874 and a value of production of \$36,597,997. They employed 2,134 persons who received \$3,086,691 in salaries and wages and paid out \$25,137,568 for raw materials, while the value added by manufacture amounted to \$10,496,252. The sugar refining industry is, therefore, of considerable importance in the industrial life of Canada. The demand created by the war gave it a great impetus. All things considered, 1919 was a record year. The number of persons employed, (3,491), the value added by manufacture, (\$16,321,882), and the exports, (\$22,953,135), were the highest recorded, while the volume of sugar manufactured was only ten per cent lower than that of the peak year 1925 when 11,714,967 cwt. were produced. Since 1925, however, exports of sugar have declined with the result that production and employment slackened considerably. Exports of sugar which in 1934 amounted to 106,873 cwt. valued at \$490,444 dropped to 38,073 cwt. valued at \$168,955 in 1935.

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

Principal Statistics Compared

A comparative study of the principal statistics relating to the industry is presented in the accompanying table for the past five years.

Table 1. - Principal Statistics Compared, 1931-1935.

Items	1935	1934	1933	1932	1931
Refineries No.	8	8	8	8	8
Capital invested \$	33,017,874	33,151,249	35,758,074	37,654,457	37,691,433
Employees on salaries -					
Male No.	333	297	249	247	247
Female No.	55	62	64	77	76
Total salaries .. \$	1,078,256	985,447	934,333	941,509	935,346
Employees on wages -					
Male No.	1,654	1,635	1,699	1,731	1,856
Female No.	92	86	80	85	86
Total wages \$	2,008,435	1,934,215	2,114,484	2,206,244	2,372,384
Cost of fuel and electricity \$	964,177	903,070	898,140	1,059,808	1,070,785
Cost of materials used \$	25,137,568	24,099,994	22,846,473	25,716,922	22,196,494

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Table 1 - Principal Statistics Compared, 1931-1935.

Items	1935	1934	1933	1932	1931
Gross value of products .. \$	36,597,997	36,007,208	37,189,960	41,022,589	43,962,061
Value added by manufacture ^x	\$ 10,496,252	11,004,144	13,445,347	14,245,859	13,694,782

^xValue added by manufacture = Gross value of products less cost of materials and fuel and electricity used.

Production in Sugar Refineries

Table 2 gives the production of sugar and its by-products by class, quantity and selling value at the refinery for the years 1934 and 1935. The quantity of sugars produced in Canadian refineries during 1935 was greater than that of 1934 by 80,254,281 pounds but the value increased by only \$363,802. The quantity of beet sugar increased by 5,854,718 pounds and the quantity of cane sugar increased by 74,399,563 pounds, making the increase as stated above. Molasses also shows an increase in quantity and value. Of the eight refineries reporting, three showed a value of production of over one million but under three million dollars, and five a production of over three million but under ten million dollars.

Table 2. - Sugar and By-Products.

Products	1934			1935	
	Quantity	Selling Value at Factory ^x		Quantity	Selling Value at Factory ^x
		\$			\$
Sugar --	888,763,362	35,452,112		969,017,643	35,815,914
Granulated	776,060,767	31,353,782		821,548,418	30,522,429
Yellow or brown	112,702,595	4,098,330		112,693,110	3,790,785
Pulverized or icing	Included with granulated			26,423,999	1,119,726
Fruit	" "	"		4,257,268	177,600
Loaf	" "	"		4,094,848	205,374
Syrups (not including molasses)	6,011,484	195,139		6,691,719	212,757
Molasses	32,770,001	104,874		49,198,638	295,099
Made from cane	11,280,001	51,569		15,192,615	107,587
Made from beets	21,490,000	53,305		34,006,023	187,512
Beet pulp, wet and dried ...	106,546,000	232,296		96,182,000	245,562
Other by-products	-	22,787		-	28,665
TOTAL VALUE OF PRODUCTS		36,007,208			36,597,997

^xThis value does not include excise taxes.

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Comparative Production and Consumption of Sugars

A comparative study of the production and consumption of sugars in Canada for the past four years is presented in table 3. Consumption of any commodity is computed on the basis of production plus imports less exports. The per capita consumption of sugar of all kinds by quantity and value (based on an estimated population) is shown for a four-year period.

Table 3. -- Production of Sugars.

Kind of Sugar	1 9 3 5	1 9 3 4	1 9 3 3	1 9 3 2
Sugar made from cane .. Lb.	849,159,975	774,760,412	740,197,553	812,482,180
Sugar made from beets . Lb.	119,857,668	114,002,950	131,392,501	132,016,859
Total Value \$	35,815,914	35,452,112	36,793,828	40,544,052
TOTAL PRODUCTION				
OF SUGAR Lb.	969,017,643	888,763,362	871,590,054	944,499,039
TOTAL VALUE \$	35,815,914	35,452,112	36,793,828	40,544,052

Consumption of Sugars.

	1 9 3 5	1 9 3 4	1 9 3 3	1 9 3 2
Sugar Production Lb.	969,017,643	888,763,362	871,590,054	944,499,039
\$	35,815,914	35,452,112	36,793,828	40,544,052
plus				
Sugar Imports Lb.	4,292,000	5,341,600	5,458,900	3,786,600
\$	202,401	201,773	162,148	143,930
TOTAL Lb.	973,309,643	894,104,962	877,048,954	948,285,639
\$	36,018,315	35,653,885	36,955,976	40,687,982
less				
Sugar Exports Lb.	3,807,300	10,687,300	17,994,400	9,048,300
\$	168,955	490,444	843,613	428,337
SUGAR AVAILABLE				
FOR CONSUMPTION Lb.	969,502,343	883,417,662	859,054,554	939,237,339
\$	35,849,360	35,163,441	36,112,363	40,259,645
Per Capita				
Consumption Lb.	88.55	81.53	80.43	90.51
\$	3.27	3.25	3.38	3.88

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Production of Sugar Beets and Beetroot Sugar

The acreage sown to sugar beets, 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 1918-1935. Acreage sown to sugar beets increased during the year by 13,490 acres, the total yield by 46,551 tons and the total value of the crop by \$281,116.

Table 4. -- Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar Compared, 1918-1935.

Year	Acres	Total	Yield	Total	Average	Production and Value (at the		
	Grown	Yield	per	Value	price	refinery) of refined		
	Acres	Tons	Tons	\$	\$ cts.	Lb.	\$	\$ cts.
								per Cwt.
1918	18,000	204,000	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	199,334	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	114,002,950	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

Table 5. -- Wholesale Prices of Sugar at Montreal and Vancouver for Specified Months, 1934 and 1935.

(Compiled by the Internal Trade Branch)

	Sugar at Montreal				Sugar at Vancouver			
	Sugar, Granulated Standard, per Cwt.		Sugar No. 1 Light, per Cwt.		Sugar, Granulated f.o.b. Factory		Sugar No. 3 Yellow, per cwt. f.o.b. Factory	
	1934	1935	1934	1935	1934	1935	1934	1935
	\$	\$	\$	\$	\$	\$	\$	\$
January	6.37	4.90	6.09	4.61	6.32	4.77	5.85	4.46
April	6.18	4.90	5.90	4.61	6.10	4.76	5.63	4.45
July	5.18 ^x	4.90	4.90 ^x	4.61	4.94 ^x	4.71	4.63 ^x	4.40
October	5.09	4.71	4.61	4.42	4.75	4.58	4.45	4.27

^x \$2.00 excise tax included between January and June, 1934, when the tax was reduced to \$1.00.

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Materials Used

The cost of materials used in the industry during 1935 as shown in table 6 amounted to \$25,137,568. This is an increase from the previous year of \$1,037,574. Raw materials, consisting of raw cane sugar and sugar beets, constitute 91.1 per cent of the total, other materials 1.7 per cent and containers of all kinds the balance of 7.2 per cent. The average cost price of raw cane sugar laid down at the factory fell from \$2.44 per cwt. in 1934 to \$2.27 per cwt. in 1935. The cost at the factory of sugar beets was \$6.30 per ton in 1934 and \$6.27 in 1935.

Table 6. - Materials Used.

Kinds of Materials	Unit of Measure	1934		1935	
		Quantity	Cost Value at the Refinery	Quantity	Cost Value at the Refinery
			\$		\$
Raw cane sugar	Lb.	797,253,498	19,426,004	880,021,529	20,019,030
Sugar beets	Tons	412,672	2,599,982	459,223	2,881,098
Boneblack purchased	Lb.	2,433,976	102,642	2,232,820	84,589
Infusorial earth	"	2,562,552	69,116	4,307,142	96,560
Lime	"	566,542	3,618	1,368,073	5,341
Limestone	Tons	20,856	50,659	23,115	53,531
Sulphur	Lb.	210,330	5,080	308,978	7,986
Sulphuric acid	"	337,993	4,019	356,300	4,200
Hydrochloric or muriatic acid	"	130,149	4,390	135,530	4,178
Soda ash	"	192,241	4,635	193,966	4,578
Other chemical materials.	-	-	4,354	-	27,849
Containers, (boxes, bags, etc.)	-	-	1,672,596	-	1,823,619
All other materials and supplies	-	-	152,899	-	81,614
TOTAL COST OF MATERIALS	-	-	24,099,994	-	25,137,568

Table 7. - Capital Invested in the Sugar Industry.

Items of Capital	1934	1935
	\$	\$
Fixed Capital -		
Present value of land, buildings, fixtures, machinery, tools, etc.	18,878,928	17,555,616
Working Capital -		
Inventory value of materials on hand, stocks in process, finished products, fuel and miscella- neous supplies on hand	8,146,162	8,303,793
Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	6,126,159	7,158,465
TOTAL CAPITAL INVESTED	33,151,249	33,017,874

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Employment Statistics

Employment statistics are given in tables 8, 9 and 10. Wage-earners in 1935 numbered 1,654 males and 92 females, with a payroll of \$2,008,435, while salaried employees numbered 333 males and 55 females, with salaries totalling \$1,078,256. Compared with 1934 there was an increase of 54 in the number of persons employed and \$167,029 in the salaries and wages paid. The maximum employment of wage-earners was reached in October with a total of 2,703 and the minimum in March with a total of 1,116.

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 267 in 1935 and 260 in 1934. Four of the eight factories employed between 100 and 300 persons, (average 191), and the other four employed between 300 and 400 persons, (average 343).

Table 8. -- Employees by Classes, Number, Sex and Remuneration, 1935.

Classes of Employment	Persons Employed		Salaries and Wages
	Male	Female	
	No.	No.	\$
Salaried employees	333	55	1,078,256
Wage-earners (average number)	1,654	92	2,008,435
TOTAL NUMBER EMPLOYED IN 1935	1,987	147	3,086,691
TOTAL NUMBER EMPLOYED IN 1934	1,932	148	2,919,662

Table 9. -- Number of Wage-earners Employed by Months and Sex, 1935.

Months	Number of Employees		Months	Number of Employees	
	Male	Female		Male	Female
January	1,382	57	July	1,766	99
February	1,145	60	August	1,697	97
March	1,056	60	September	1,508	77
April	1,288	77	October	2,592	111
May	1,732	98	November	2,534	125
June	1,596	99	December	1,548	137
Total employment during the year				19,844	1,097
Average monthly employment during the year .				1,654	92

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Table 10. -- Hours Worked by Wage-earners in Months of Highest Employment.

Hours Worked per Week	Number of Wage-earners in Months of Highest Employment whose Regular Hours per Week were:	
	1934	1935
40 hours or less	336	522
41-43 hours	3	30
44 hours	1	11
45-47 hours	4	18
48 hours	390	1,101
49-50 hours	5	17
51-53 hours	16	31
54 hours	369	75
55 hours	13	17
56-59 hours	48	61
60 hours and over	1,720	1,022

The above table does not include overtime.

Power Equipment

Table 11. -- Power Equipment by Classes, 1935.

Classes of Power	Ordinarily in Use		In Reserve or Idle	
	Number of Units	Manufacturers' Rating of Horse-power Capacity	Number of Units	Manufacturers' Rating of Horse-power Capacity
Steam engines and turbines	84	13,000	1	600
Gasoline, gas and oil engines .	18	180
Total Primary Power	102	13,180	1	600
Electric motors operated by purchased power	536	6,565	33	1,023
TOTAL POWER USED IN MANUFACTURING	638	19,745	34	1,623
Electric motors operated by power generated by the establishment	969	14,247	7	23
Total Electric Motor Installation	1,505	20,812	40	1,046
Boiler Installation	64	28,705		

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Table 12. -- Fuel Used by Classes, 1935.

Classes of Fuel	Unit of Measure	Quantity	Cost Value delivered at Works
			\$
Bituminous coal, Canadian	Short Ton	135,647	609,631
" " imported	" "	-	-
Lignite coal, Canadian	" "	17,807	32,378
Coke	" "	2,595	22,536
Fuel and diesel oil	Imp. Gal.	7,404,990	223,152
Gasoline	" "	5,877	1,277
Kerosene or coal oil	" "	15	3
Gas, manufactured	M cu. ft.	696	769
TOTAL COST OF FUEL	-	-	889,746
Electricity purchased (including service charges)	Kw. H.	12,117,667	74,431
TOTAL COST OF FUEL AND ELECTRICITY ..	-	-	964,177

Imports and Exports

Table 13 shows the importation for consumption in Canada of the undermentioned commodities by countries, quantity and value. The total value of imports of sugar and molasses during the calendar year 1935 was \$17,997,145, an increase of \$1,265,397 over 1934.

Table 13. -- Imports for Consumption by Countries, Calendar Years 1934 and 1935.

Articles by Countries		1 9 3 4		1 9 3 5	
		Quantity	Value	Quantity	Value
			\$		\$
Sugar, n.o.p., not above					
No. 16 D. S. in colour,					
etc. Total	Lb.	653,215,700	10,994,141	569,693,900	9,713,630
Australia	"	9,757,400	165,264	1,744,000	26,360
British South Africa.	"	14,348,000	248,313	25,832,300	427,539
British Guiana	"	88,171,500	1,695,136	206,881,800	3,659,991
Barbados	"	139,512,800	2,690,004	73,736,000	1,219,355
Jamaica	"	100,614,900	1,840,555	114,090,500	1,938,884
Trinidad and Tobago .	"	38,482,100	729,550	75,750,500	1,262,127
Other Br. West Indies	"	29,134,700	546,792	44,981,700	761,645
Cuba	"	51,876,900	530,034	3,794,100	39,601
Fiji Islands	"	87,216,800	1,583,761	22,523,500	375,404
San Domingo	"	87,337,100	901,011	-	-
Mexico	"	2,264,400	17,483	359,500	2,724
Dutch Guiana	"	3,185,200	32,565	-	-
Dutch East Indies ...	"	1,287,400	13,133	-	-
Other Countries	"	26,500	540	-	-

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Table 13. - Imports for Consumption by Countries,
Calendar Years 1934 and 1935. - (Cont'd.)

Articles by Countries		1 9 3 4		1 9 3 5	
		Quantity	Value	Quantity	Value
			\$		\$
Sugar above No. 16 D. S.					
in colour, for refining					
purposes only Total					
	Lb.	201,861,000	3,132,289	326,768,700	5,465,136
Australia	"	50,539,300	865,536	61,316,000	979,098
British East Africa ...	"	14,112,000	252,809	50,271,200	914,296
British South Africa ..	"	46,881,100	820,596	45,205,000	752,649
British Guiana	"	4,338,100	76,403	30,326,600	507,408
Fiji Islands	"	17,105,200	294,170	79,561,600	1,323,541
San Domingo	"	49,611,100	513,434	-	-
Barbados	"	8,292,300	150,130	3,357,800	51,386
Jamaica	"	-	-	12,906,400	207,976
Trinidad and Tobago ...	"	4,434,600	80,818	36,654,600	606,504
Other Br. West Indies .	"	1,100,100	19,943	7,169,500	122,278
Cuba	"	5,447,200	58,450	-	-
Sugar above No. 16 D. S.					
in colour and all					
refined sugars Total					
	Lb.	5,341,600	201,773	4,292,000	202,401
United Kingdom	"	4,200	238	7,200	386
United States	"	3,797,700	167,681	4,164,900	199,660
British East Africa ...	"	1,359,400	30,303	-	-
Other Countries	"	180,300	3,551	119,900	2,355
Invert sugar and syrups,					
the product of the					
sugar cane or beet and					
all imitations and					
substitutes thereof. Total					
	Lb.	753,700	14,372	454,100	9,990
United States	"	753,700	14,372	454,100	9,990
Molasses of cane,					
testing under 35°					
but not less than					
20° Total					
	Gal.	201,620	38,846	179,696	24,901
United Kingdom	"	179	12	-	-
United States	"	84,011	6,300	130,434	15,999
Cuba	"	115,118	31,781	48,655	8,757
Other Countries	"	2,312	753	607	145
Molasses of cane, testing					
under 56° but not					
less than 35° Total					
	Gal.	10,895	3,673	10,960	4,143
United States	"	10,895	3,673	10,960	4,143

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

Table 13. - Imports for Consumption by Countries,
Calendar Years 1934 and 1935. - (Concl'd.)

Articles by Countries	1934		1935	
	Quantity	Value	Quantity	Value
		\$		\$
Molasses testing not more than 56° the produce of any British Country entitled to benefits under preferential tariff Total Gal.	9,375,576	2,277,030	13,206,231	2,515,990
United Kingdom	"	--	1,111,440	89,547
Barbados	"	6,673,798	2,073,584	6,688,287
Trinidad and Tobago ...	"	274,250	13,342	1,760,450
Other Br. West Indies ..	"	349,594	95,816	866,628
British Guiana	"	2,077,934	94,288	2,779,426
Molasses and syrups of all kinds, the product of sugar cane or beet, n.o.p., and all imitations or substitutes Total Lb.	2,304,600	69,624	1,627,900	60,954
United Kingdom	"	383,800	19,454	400,000
United States	"	1,787,700	48,843	1,118,100
Other Countries	"	133,100	1,327	109,800

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

The exports of sugar, molasses and syrups and sugar beets are shown in table 14 for the calendar years 1934 and 1935. The total value of the exports in 1935 amounted to \$326,822, a decrease of \$216,864 as compared with the previous year. Sugar of all kinds, valued at \$168,955, was the principal item of export, of which \$112,784 or almost 67 per cent went to Newfoundland.

Table 14. Exports of Canadian Produce, Calendar Years 1934 and 1935.

Articles by Countries	1934		1935	
	Quantity	Value	Quantity	Value
		\$		\$
Sugar of all kinds, n.o.p. Total Lb.	10,687,300	490,444	3,807,300	168,955
United States	"		527,200	21,287
British Guiana	"	41,200	46,800	2,199
British Honduras	"	437,200	5,200	285
Bermuda	"	300,800	67,100	3,107
Barbados	"	25,500	21,100	1,267
Trinidad and Tobago	"	89,000	110,300	6,064
Other Br. West Indies	"	1,476,400	446,100	19,499
Newfoundland	"	8,189,400	2,525,100	112,784
St. Pierre and Miquelon	"	122,200	52,000	2,195
Other Countries	"	5,600	6,400	268
Molasses and syrups of all kinds Total Gal.	776,180	50,258	2,010,479	153,281
United States	"	775,585	2,009,977	152,949
Other Countries	"	595	502	332
Sugar beets Total Ton	613	2,984	1,009	4,586
United States	"	613	1,009	4,586
TOTAL VALUE OF EXPORTS		543,686		326,822

THE SUGAR REFINING INDUSTRY IN CANADA, 1935.

List of Sugar Refineries Operating in 1935.

NOVA SCOTIA

- (1) Acadia Sugar Refining Company Limited, Dartmouth.

NEW BRUNSWICK

- (1) Atlantic Sugar Refineries Limited, Saint John.

QUEBEC

- (1) Canada & Dominion Sugar Company Limited, 1410 Montmorency Street, Montreal.
(1) St. Lawrence Sugar Refineries Limited, 4026 Notre Dame Street East, Montreal.

ONTARIO

- (2) Canada & Dominion Sugar Company Limited, Chatham.
(2) Canada & Dominion Sugar Company Limited, Wallaceburg.

ALBERTA

- (2) Canadian Sugar Factories Limited, Raymond.

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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