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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

1942

STATISTICS STATISTIQUE!

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OTTAWA 1943

DEPARTMENT OF TRADE AND COMMERCE

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OTTAWA - CANADA

Dominion Statistician: S. A. Cudmore, M.A. (Oxon.), F.S.S., F.R.S.C. Chief, General Manufactures Branch: A. Cohen, B.Com.

THE SUGAR REFINING INDUSTRY IN CANADA, 1942

The output of the sugar refining industry decreased by 425,633,853 pounds during 1942. The production of sugar of all kinds amounted to 801,119,215 pounds (612,052,345 pounds made from cane and 189,066,870 pounds from beets). The production of cane sugar decreased by 398,821,452 pounds and that of beet sugar by 26,812,401 pounds. Granulated sugar comprises over 85 per cent of the total sugar produced.

Although the quantity of beet sugar produced in 1942 was smaller than in 1941, the percentage of beet sugar to the total produced was 23.6, the highest since the inception of the annual census of manufactures in 1917. The percentage of beet sugar in 1941 was 17.6 and in 1940 18.5.

Prices of refined sugar at the factory were slightly higher in 1942 than in the previous year. Sugar of all kinds rose from 4.95 cents per pound to 5.5 cents. Granulated sugar rose from 4,98 cents to 5.52 cents, yellow sugar from 4.44 cents to 4.94 cents, while icing sugar rose from 5.56 cents to 6.23 cents.

The refineries operating in 1942 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 1942 reported a capital investment of \$45,232,672, a gross value of production of \$45,969,711, they employed 2,326 persons who received \$3,772,431 in salaries and wages, and paid out \$33,283,971 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.

Table 1. - Principal Statistics of the Sugar Refining Industry, Representative Years, 1917 - 1942.

Year		Refineries Reporting	Capital Invested	Em- ployees	Salaries and Wages	Cost of Materials Used	Gross value x of Production
		No.	\$		The second secon	\$	\$
1917	4 9 3	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	35,640,124	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	33,199,993	2,559	3,413,698	27,924,998	40,405,377
1937	• 0 •	10	35,413,781	2,332	3,318,861	29,013,057	40,916,044
1938	0	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	000	11	42,966,073	2,538	3,623,661	42,150,263	57,274,122
1941	0 2 9	11	43,915,168	2,642	3,834,639	46,067,190	62,402,709
1942		11	45,232,672	2,326	3,772,431	33, 283, 971	45,969,711

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

Table 2. - Comparison of Principal Statistics.

Items		1942	1941		ncrease ecrease
Refineries reporting	No.	11	11		none
Capital invested	\$	45,232,672	43,915,168	+	1,317,504
Employees on salaries -					
Total	No.	459	476	_	17
Male	No.	353	378	400	25
Female	No.	106	98	+	8
Total salaries	\$	1,162,006	1,187,467	-	25,461
Employees on wages - (monthly a	verage)				
Total	No.	1,867	2,166		299
Male	No	1,701	2,043		342
Female	No.	1.66	123	+	43
Total wages	\$	2,610,425	2,647,172	4-4	36,747
Cost of fuel and electricity	\$	1,225,955	1,487,848	nia	261,893
Cost of materials used	\$	33,283,971	46,067,190	-	12,783,219
Gross value of production	\$	45,969,711	62,402,709	_	16,432,998
Value added by manufacture x	\$	11,459,785	14,847,671		5,587,686

^{*} 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.

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 1941 and 1942. The quantity of sugars produced in Canadian refineries during 1942 was less than that of 1941 by 425,633,853 pounds and the selling value decreased by \$16,725,935. The quantity of beet sugar decreased by 26,812,401 pounds and cane sugar by 398,821,452 pounds, making the decrease as stated above. Molasses decreased in quantity but shows an increase in value. Of the eleven refineries reporting, one had a value of production of under one million dollars, six a production of between two and five million and four a production of over five million dollars.

Table 3. - Sugar and By-Products 1 9 4 2 1941 Selling Selling Products Quantity Value at Quantity Value at Factory 1/ Factory 1/ Pounds Pounds 1,010,873,797 32,680,904 49,116,760 Made from beet 189,066,870 11,349,746 215,879,271 11,639,825 Total 801,119,215 44,030,650 1,226,753,068 60,756,585 37,913,185 71,047,750,817 52,216,773 Yellow or Brown 82,639,909 132,674,842 4,085,518 5,894,980 Pulverized or icing 19,384,615 1,207,884 36,199,630 2,012,312 Fruit 2,189,263 127.923 _3,935,471 217,191 Loaf 10,385,243 696,140 6,192,308 415.329 Syrups (not including molasses) 8,827,805 5,748,097 316.316 183,555 Molasses - Made from cane 11,522,318 168,283 19,854,719 233,551 Made from beet 53,237,849 695,549 53,656,627 494,502 Total 64,760,167 863,832 73,511,346 728,053 Beet pulp, wet and dried 204.694,000 602,742 206,268,000 664,382 Other products 156,171 70.134 TOTAL VALUE OF PRODUCTS., 45,969,711 62,402,709

^{1/} This does not include excise taxes.

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 1942. Acreage of sugar beets harvested decreased by 1,544 acres, the total yield by 6,732 tons but the total value of the crop increased by \$653,366.

Table 4. - Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar Compared, 1918 to 1942.

			Yield		Average	Production	and Value (at the
Year	Acres	Total	Per	Total	Price	refiner	y) of refine	d
	Grown	Yield	Acre	Value	Per Ton	beet	root sugar	
	No.	Tons	Tons	\$	\$ cts.	Lb.	\$	\$ cts.
							ре	r 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
1936	x50,444	555,969		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		3,403,635	6.83	143,013,847	6,001,380	4.20
1939	x57,316	586,444		4,417,372	7.53	169,320,343	8,063,332	4.76
1940	x77,548	825,344		6,022,670	7.30	213,602,511	10,853,665	5.08
1941	x63,925	708,616		5,781,151	8.16	215,879,271	11,639,825	5.39
1942	x62,381	701,884	11.25	6,434,517	9.17	189,066,870	11,349,746	6.00

This is the number of acres harvested. The acreage seeded is slightly higher than these figures, being 64,768 acres in 1942 and 70,803 acres in 1941.

Table 5. - Wholesale Prices of Sugar at Montreal and Vancouver for Specified Months, 1941 and 1942

		(Compile	d by the	Interna	I Trade B	ranch		
		Sugar at	Montreal			Sugar at	Vancouve	er
	Sugar.	Granulated	Sugar	No. 1	Sugar Gr	anulated	Sugar	No. 3
	- No. 10	d, per Cwt.	_	Yellow	f.o.b.	Factory	Yellow	per Cwt.
			per	Cwto			f.o.b.	Factory
	1942	1941	1942	1941	1942	1941	1942	1941
	\$	\$	\$	\$	\$	\$	\$	\$
January	. 6.89	5.89	6:61	5.61	6.89	5.82	6.51	5.49
April	. 6.89	6.89	6.63	6.61	6.89	6.85	6.51	6.52
July	. 6.89	6.89	6.63	6.61	6.89	6.84	6.51	6.51
October		6.89	6.63	6.61	6.89	6.84	6.51	6.51

Materials Used

The cost of materials used in the industry during 1942, as shown in Table 6, amounted to \$33,283,971. This is a decrease from the previous year of \$12,783,219. Raw materials, consisting of raw cane and sugar beets, constitute almost 93 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 \$3.87 per hundredweight in 1942 and \$3.54 per hundredweight in 1941. The cost at the factory of sugar beets was \$9.17 per ton in 1942 and \$8.16 in 1941.

		Table 6 Mat	terials Used	1 9	4.1
Kinds of Materials	Unit of Measure	Quantity	A 4 22 3	Quantity	Cost Value at the Refinery
			\$		\$
Raw cane sugar	Pound	629,893,608	24,408,760	1,046,709,658	37,084,667
Sugar beets	Ton	701,884	6,434,517	708,616	5,781,151
Cornstarch	Pound	678,542	39,245	1,212,276	65,146
Boneblack	11	1,542,014	73,776	2,668,294	133,620
Vegetable char	.11	251,653	29,452	417,661	47,864
Infusorial earth	11	3,007,180	75,295	5,333,131	133,129
Lime	îtt .	565,472	3,488	987,785	6,049
Limestone	Ton	36,553	92,981	40,207	102,033
Sulphur	Pound	283,780	7,411	294,801	6,877
Acids (sulphuric, hyd	lro-				
chloric, muriatic ar	nd				
phosphoric)	11	853,902	25,296	1,095,165	35,946
Soda ash	11	378,112	8,762	225,721	4,924
Filtering materials,					
n.e.s	-	-	13,462		20,370
Other chemical materi	als -	-	68,558	where	127,856
Containers (boxes,					
hags, etc.)	-	-	1,810,252	-	2,331,806
All other materials a	and				
supplies	-	-	192,716		185,752
TOTAL COST OF MATERIA	LS				
USED	4000		33,283,971	-	46,067,190

Capital Invested

Table 7. - Capital Invested in the Sugar Industry

Items of Capital	1942	1941
	\$	\$
ixed Capital -		
Present value of land, buildings, fixtures,		
machinery, tools, etc	22,127,564	18,204,176
Working Capital -		
Inventory value of materials on hand,		
stocks in process, fuel and miscellaneous		
supplies on hand	4,878,429	4,928,539
Inventory value of finished products on hand	9,098,988	13,148,345
Operating capital (cash, bills and accounts		
receivable, prepaid expenses, etc.)	9,127,691	7,634,108
	15 979 679	13 015 169
OTAL CAPITAL INVESTED	45,232,672	43,915,168

Employment Statistics

Employment statistics are given in Tables 8, 9 and 10. Wage-earners in 1942 numbered 1,701 males and 166 females, with a payroll of \$2,610,425 while salaried employees numbered 353 males and 106 females, with salaries totalling \$1,162,006. Compared with 1941 there was a decrease of 316 in the number of persons employed and \$62,208 in the salaries and wages paid. The maximum employment of wage-earners was reached in November with a total of 2,657 and the minimum in June with a total of 1,319.

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 211 in 1942 and 240 in 1941. Six of the eleven factories employed between 100 and 200 persons (average 154), four employed between 200 and 400 persons (average 325) and one employed less than one hundred persons.

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

37	Salaried Employees			Wage-earners (Monthly Averages)			Total Employees Salaries and Wages		
Year	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	2,137,277	2,178	154	3,318,861
1938	364	61	1,163,988	1,809	84	2,151,645	2,173	145	3,315,635
1939	346	60	1,187,767	1,888	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	3,834,839
1942	353	106	1,162,006	1,701	166	2,610,425	2,054	272	3,772,431

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

	194	194	1	
Months	Male	Female	Male	Female
January	1,750	113	1,717	91
February	1,527	162	1,569	115
March	1,466	139	1,508	118
April	1,499	115	1,587	86
day	1,522	148	1,778	136
June	1,203	116	1,902	135
July	1,315	150	1,802	123
August	1,291	154	1,904	137
September	1,865	203	2,434	132
October	2,376	227	3,427	134
November	2,419	238	3,212	153
December	2,162	217	1,685	118
Monthly Average	1,701	166	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.

N. hand O. Ivania Wanted	194 Number of E		1941 Number of Employees	
Number of Hours Worked per Week	Male		Male	Female
30 hours or less	152	16	215	10
31 - 43 hours	326	69	452	63
44 hours	70	55	29	34
45 - 47 hours	79	11	146	7
48 hours	269	33	499	9
49 - 50 hours	97	14	147	14
51 - 54 hours	132	27	194	3
55 hours	47	6	71	3
56 - 64 hours	829	24	844	24
55 hours and over	894	17	1,006	-
AVERAGE HOURS PER WEEK	56.0	46.1	54.1	43.6
AVERAGE WEEKLY EARNINGS	\$31.67	\$16.90	\$25.89	\$13.24

Table 11. - Power Equipment

1 9 4 2

1941

			Manufacture	rs1	Manufacturers'
Classes of Power		Number	Rating of		Rating of
		of	Horse-Power		Horse-Power
		Units	Capacity		Capacity
Steam engines and turbines	- 4				
In use		. 38	16,468	37	16,078
Idle		. 3	790	3	790
Consoling and oil one;	noc				
Gasoline, gas and oil engi		. 31	816	30	791
In use			45	3	45
			40		40
Electric motors operated b	У				
purchased power -		207	0. 455	270	0.005
In use			8,477	632	8,085
Idle		. 65	1,842	64	1,814
TOTAL MONTH ALLEY LAND TO BE					
TOTAL POWER AVAILABLE FOR		0.77	00 470	570.0	05 205
MANUFACTURING		831	28,438	769	27,603
Electric motors operated b	У				
power generated by the					
establishment - In use		1,762	20,672	1,717	15,507
Idle		. 117	1,410	109	1,181
Stationery hoiland In us	0	67	20 7/19	67	31 939
Stationary boilers - In us			29,742	2	31,232 650
Tate			000	6	0.50
Table 12	Consur	mption of Fue	l and Electi	ricity.	
-1757.570	Unit of	194	2	1	941
Kinds of Fuel	Measure	Quantity	Cost Value	Cuanti ty	Cost Value
				Quarter of	
			\$		\$
Bituminous Coal, Canadian	Ton	54,949	278,613	72,567	377,026
" " Imported	17	59,185	400,815	77,007	500,829
Lignite Coal	.43	62,831	142,075	55,569	122,448
Coke	99	3,506	50,575	3,279	36,186
Gasoline (x)	Imp.Gal.	20,762	6,480	33,805	9,016
Fuel Oil	11 11	4,492,584	253,690	7,651,212	333,913
Kerosene or coal oil	`tt '81	1,580	403	1,724	
(Manufactured	M Cu.ft.	1,617	1,705	1,609	1,715
Gas (Natural	11 11 11		1,457		1,150
TOTAL COST OF FUEL			1,135,813		1,382,724
Electricity purchased (including service charges	J Km II	11 395 356	90 749	13 771 000	105 194
(Including service charges	/ IVWelle	11,020,000	20,142	10, 111,000	TOOPIE
MOMENT GOOM OF THEFT AND CO.	Salara Trans				
TOTAL COST OF FUEL AND			7 005 055		7 407 040
ELECTRICITY	T T	660	1,225,955	_	1,487,848

⁽x) Includes gasoline used in cars and trucks.

List of Sugar Refineries.

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, Toronto

(2) Canada & Dominion Sugar Co., Ltd. Chatham
(2) Canada & Dominion Sugar Co., Ltd. Wallaceburg

MANITOBA

(2) The Manitoba Sugar Company, Limited (Fort Carry) 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

- (1) Make cane sugar only.
- (2) Make beet sugar only.

