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CANADA

DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS CENSUS OF INDUSTRY

STATISTICS STATISTIQUE

REPORT

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SUGAR INDUSTRY

IN

CANADA

1931

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DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS CENSUS OF INDUSTRY OTTAWA, CANADA

Dominion Statistician:
Acting Chief, Census of Industry:

R. H. Coats, B.A., F.S.S. (Hon.), F.R.S.C. A. Cohen, B. Com.

THE SUGAR REFINING INDUSTRY IN CANADA, 1931.

Ottawa, August, 1932. - Statistics of the sugar refining industry in Canada for the year 1931 are presented in this report. The refineries operating during the year were located as follows: - Ontario 2 (Chatham and Wallaceburg), Quebec 2 (both at Montreal), New Brunswick 1, (Saint John), Nova Scotia 1, (Dartmouth), Alberta 1, (Raymond) and British Columbia 1 (Vancouver). These eight sugar refineries in 1931 reported a capital investment of \$37,691,433 and a value of production of \$43,962,061. They also employed 2,265 persons who received \$3,307,730 in salaries and wages and paid out \$29,196,494 for raw materials while the value added by manufacture amounted to \$14,765,567. 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 10 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 in 1931 amounted to 149,384 cwt. valued at \$728,825.

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. Decreases from 1930 appear in the items of capital, wage-earners, wages, the cost of fuel and the cost of materials.

Table 1 I	Table 1. Principal Statistics Compared, 1927-1931.							
	1931	1.930	1929	1.928	1927			
Refineries No.	8	8	8	8	8			
Capital invested \$ Employees on salaries -	37,691,433	43,855,155	43,534,113	48,625,818	50,039,122			
Male No.	247	231	246	239	290			
Female No.	76	63	61	60	56			
Total salaries \$	935,346	908,670	937,641	922,969	993,886			
Employees on wages -					ALC: NO			
Male No.	1.,856	1,889	1,916	1,979	2,253			
Female No.		98						
Total wages \$		2,651,590						
Cost of fuel \$		1,029,175						
Cost of materials \$	29,196,494	30,610,701	35,640,124	40,551,874	47,138,854			
Gross value of products \$ Value added by manu-	43,962,061	42,935,722	47,151,960	52,085,155	60,502,664			
facture\$	1.4,765,567	12,325,021	11,511.836	11.533.281	13.363.810			

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 1930 and 1931. The quantity of refined granulated sugars, produced in Canadian refineries during 1931 was greater than that of 1930 by 50,840,948 pounds, and the value by \$1,289,774. The quantity of beet sugar increased by 12,514,428 pounds, and the quantity of cane sugar by 38,326,520 pounds, making the increase as stated above. Soft sugars also increased by 4,440,591 pounds, but decreased in value by \$101,050. Syrups show a decrease in value of \$24,660 and molasses a decrease of \$136,179. Of the eight refineries reporting, three showed a value of production between one and three million dollars and five a production of over five millions.

Table 2. - Sugar and By-Products, 1930 and 1931.

	1 9 3	1	1 9 3	0
	Quantity	Selling Value	Quantity	Selling Value
	918 139 312	43 \$340	442,851,113	\$
Franulated sugars - Total	-893,127,950	39,246,357	842,287,002	37,956,583
Made from cane	785,988,821	34,451,806	747,662,301	33,426,639
Made from beets	107,139,129	4,794,551	94,624,701	4,529,944
Soft sugars -				
Made from cane	-105,011,362	4,092,612	100,570,771	4,193,662
yrups -				
Made from cane	5,556,705	194,046	5,774,609	218,706
olasses - Total	61,855,448	259,222	54,185,468	395,401
Made from cane	20,491,448)	259,222	22,712,798)	395,40]
Made from beets	41,364,000)	, and a second	31,472,670)	000, 401
seet pulp, wet and dried	78,058,000	169,824	72,336,000	1.38,835
all other by-products		_		32,535
Total Value of Products	ride	43,962,061		42,935,722

Comparative Production and Consumption of Sugars

A comparative study of the production and consumption of sugars in Canada for the past five years by classes, quantity and value 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 five year period.

Table	3.	ries.	Production	c.f	Sugars,	1927-1931.
-------	----	-------	------------	-----	---------	------------

			4-			
Kind of Sugar		1931	1930	1929	1928	1 9 27
Granulated sugars	eu					
Made from cane	lb.	785,988,821.	747,662,301	767,307,786	765,197,219	811,084,788
Made from beets		107,139,129	94,624,701	69,399,213	64,653,348	60,969,131
Total Value	\$	39,246,35?	37,956,583	41,756,126	46,158,093	53,808,350
Soft sugars -						
Made from cane	lb.	105,011,362	100,570,771	95,194,213	97,766,317	107,079,213
Value	\$		4,193,662	4,403,782	5,144,504	5,910,074
Total production						
of sugar	lb.	998,139,312	942.857.773	931,901,212	927,616.884	979,133,132
Total Value	\$			46,159,908		59,718,424
1 1 1 1 1 2 2 2 2						
		Consumption	on of Sugars	, 1927–1931		
Sugar production	1b.	998,139,312	942,857,773	931,901,212	927,616,884	979,133,132
	\$	43,338,969			51,302,597	59,718,424
plus	116	20 706 000	50,812,600	41,593,500	46,034,100	34,822,300
Sugar imports	lb.	20,706,000	1,402,808	1,254,373	1,728,550	1,594,438
	₩	547,411	1,402,000	1,601,010	1,120,000	1,004,100
Total	lb.	1,018,845,312	993,670,373	973,494,712	973,650,984	1,013,955,432
	\$	43,886,380	43,553,053	47,414,281	53,031,147	61,312,862
Less	75	14 039 400	91 915 000	28,531,000	48,140,300	195,752,100
Sugar exports	lb.	14,938,400 728,825	21,815,000	1,407,349	2,444,624	8,933,619
	-	720,000	2,000,000	-,,,		, , , , , , , , , , , , , , , , , , , ,
Sugar available)	lb.	1,003,906,912	971,855,373			818,203,332
for consumption)	\$	43,157,555	42,527,980	46,006,932	50,586,523	52,379,243
Per capita)	lb.	96.77	97.83	96,46	95.82	85.95

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 1918-1931. Acreage sown to sugar beets increased during the year by 2,805 the total yield by 38,416 tons but the total value of the crop decreased by \$88,427.

Table 4. - Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar Compared, 1918-1931.

1918 1	8,000 204	ns Tons	\$	\$ cts.	Lb.	\$	cents per 1b.
		.000 11.25	0 505 525				
1920 3- 1921 2- 1922 1- 1923 1- 1924 3- 1925 3- 1926 3- 1927 2- 1928 3- 1929 3-	4,491 343 5,535 199 4,955 12? 7,941 159 1,111 295 4,803 370 0,073 26? 5,961 206 4,323 244 2,556 235	,000 9.50 ,000 9.94 ,334 7.80 ,807 8.55 ,200 8.87 ,177 9.50 ,047 10.63 ,754 8.90 ,713 7.96 ,930 7.14 ,465 7.23 ,576 9.81	2,630,027 5,307,243 1,974,384 966,521 1,922,668 1,704,791 2,688,302 2,286,761 2,012,134 2,041,465 2,080,996	12.71 14.61 15.47 9.90 7.56 12.08 5.78 7.27 8.54 9.73 8.33 8.84 8.25	50,092,835 37,839,271 89,280,719 52,862,377 29,911,770 39,423,160 85,770,709 72,819,919 70,388,105 60,969,131 64,653,348 69,399,213 94,624,701	4,358,077 3,924,411 12,856,424 3,554,203 1,645,885 3,745,200 6,192,645 5,206,624 4,269,076 3,719,117 3,340,571 3,335,344 4,529,944	8.70 10.40 14.40 6.70 5.50 9.50 7.30 7.15 6.06 6.10 5.17 4.81 4.79

Materials Used

The cost of materials used in the industry during 1931 is shown in table 5, the total amounting to \$29,196,494. This is a decrease from the previous year of \$414,207 and is accounted for by a decrease in the average cost price of raw cane sugar, which fell from \$2.78 per cwt. in 1930 to \$2.58 per cwt. in 1931. Home grown sugar beets also show a decrease in cost laid down at the factory from \$8.25 per ton in 1930 to \$7.32 in 1931, but this is counterbalanced by an increase of 38,416 in the tonnage of beets used in 1931. This decrease in the price of raw materials is reflected in the market selling prices of the products as indicated by the average wholesale prices for each grade of sugar in the following summary table:

Grades of Sugar	Average Whol	lesale Prices	Increase (/) or Decrease (-) Wholesale
	1931	1930	Prices
	\$	\$	cents
Refined cane sugar Cwt.	4.55	4.75	20
Refined beet sugar X	4.48	4.79	.31
Light) "	4.27	4.56	

^{*} Prices at factory.

materials
The following table itemizes the various used, giving quantity and cost value. Raw materials constituted 92.5 per cent of the total cost, other materials 1.4 per cent and containers of all kinds 6.1 per cent.

Table 5. - Materials Used, 1930 and 1931.

	19	3 1	19	3 0
Kinds of Materials	Quantity	Cost Value	Quantity	Cost Value
		\$		\$
Raw cane sugar Lbs.	923,590,979	23,806,890	882,233,379	24,498,717
Sugar beets Tons	435,992	3,190,198	397,576	3,278,625
Boneblack purchased Lbs.	2,543,390	132,077	3,618,920	167,729
Infusorial earth Lbs.	1,909,256	50,119	1,364,142	37,200
Lime Lbs.	2,164,573	12,800	1,534,006	9,544
Limestone Tons	21,974	45,932	21,915	53,581
Other chemicals (sulphur, sulphuric and hydrochloric acid, lead acetate, etc.).		34,486		32,405
Boxes, bags and other containers	eact	1,783,741		1,989,990
All other materials	-	140,251	***	542,910
Total Cost of Materials		29,196,494	190	30,610,701

Table	6.	460	Capital	Invested	in	the	Sugar	Industry,	1930	and	1931.	
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1931	1930
\$	\$
22,829,935	24,230,318
2,7 49 ,52 6) 6,282,059)	9,589,956
5,829,913	10,034,881
37,691,433	43,855,155
	\$ 22,829,935 2,749,526) 6,282,059) 5,829,913

Employment Statistics

Employment statistics are given in tables 7, 8 and 9. Wage earners in 1931 numbered 1,856 males and 86 females with a pay-roll of \$2,372,384 while salaried employees numbered 247 males and 76 females with salaries totalling \$935,346. Compared with 1930 there was a drop of 16 in the number of persons employed and \$252,530 in the salaries and wages paid. The maximum employment of wage earners was reached in November with a total of 2,913 and the minimum in February with a total of 1,280.

The average number of hours per week worked by wage-earners in this industry totalled 59 for Canada. Ontario with 72 hours per week had the longest working day while British Columbia with 48 hours had the shortest day.

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 283 in 1931, compared with 285 in 1930, while five of the eight factories employed between 100 and 300 persons (average 226) and the other three employed between 300 and 500 persons (average 378.)

Table 7. - Employees, by classes, number, sex and remuneration, 1931.

	Persons	Employed	Salaries	
Classes of Employment	Mal.e	Female	and Wages	
	No.	No.	\$	
Salaried employees	247 1,856	76 86	935,346 2,372,384	
Total number employed in 1931	2,103 2,120	162 161	3,307,730 3,560,260	

Table 8. - Number of Wage-earners employed, by Months and Sex, 1931.

	No. of Employees			No. of Employees		
Months	Male	Female	Months	Male	Female	
	No.	No.		No.	No.	
January	1,275	68	July	1,706	86	
February	1,213	67	August	2,017	79	
March	1,486	87	September	2,100	85	
April	1,413	70	October	2,764	102	
way	1,656	100	November	2,812	101	
June	1,525	73	December	2,294	103	
T	otal emplo	yment during y	ear	22,261	1,021	
A	verage mon	thly employmen	t during year	1,856	86	

Table 9. - Hours worked by wage earners in months of highest employment, 1931.

per week	CANADA	Nova Scotia	New Brunswick	Quebec	Ontario	Alberta	British Columbia
	No.	No.	No.	No.	No.	No.	No.
40 hours or less	12	w Ç	12	_	-		-
41-43 hours	nust		-	anti-	Males		-
44 hours	5	0% EDP	2	-17	-	-	3
45-47 hours	134		30	100	-	-	4
48 hours	562		11	-		247	304
49-50 hours	21	-	5	-	-	-	16
51-53 hours	21	_	21		449		-
54 hours	355	292	54	neto	6000	9	-
55 hours	16	main and	16	-	4400	-	-
56-59 hours	32	~	32	-5		400	100
60 hours	744	-	22	651	-	71	Manu
Over 60 hours	1,181	-	120	124	931	6	
Average hours							
per week	59	54	57	59	72	51	48

The above table does not include overtime.

Power Equipment.

Table 10. - Power Equipment by classes, 1931.

Classes of Power	Number of Units	Horsepower according to manufacturers' rating
Steam engines and turbines	96 18	14,500 180
Total primary power	114	14,680
Electric motors operated by purchased power	534	6,874
Total power used in manufacturing	648	21,554
Electric motors operated by power generated by the establishment	864	1.3,553
Total electric motor installation	1,398	20,427
Boiler installation for any purpose	68	30,605

Table 11. - Fuel Used by classes, 1931.

Classes of Fuel	Unit of Measure	Quantity	Cost Value delivered at works
			\$
Bituminous coal, Canadian Imported	Short ton	91,890 63,79 5	3 56,534 288,094
Lignite coal, Canadian	81 91	14,058	30,722
Coke	tt tt	2,572	22,760
Fuel and diesel oil	Imp. Gal.	8,690,404	294,486
Gasoline	11 11	94	44
Gas, manufactured	M cu. ft.	655	700
Total Cost of Fuel		~~	993,340
Cost of electricity purchased during the year	CU		77,445

Imports and Exports

Table 12 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 1931 was \$22,196,524.

Table 12. - Imports for Consumption by Countries, Calendar Years 1930 and 1931.

	1930		193	1
Articles by Countries	Quantity	Value	Quantity	Value
Sugar, n.o.p., not above		\$	and a graph of the confidence	\$
No. 16 D.S. in colour,				
etc Total Lb.	812,654,100	19,315,995	798,358,400	16,953,751
Australia	894,700	49,568	13,928,500	680,200
British East Africa "	26,847,900	736,707	13,367,400	304,122
British South Africa . "	78,650,900	1,811,662	84,040,000	1,783,985
British Guiana	174,930,500	4,079,335	192,898,900	3,933,372
Barbados "	108,325,700	2,510,275	76,001,000	1,611,434
Jamaica "	97,828,000	2,211,593	86,736,900	1,799,205
Trinidad and Tobago "	77,354,600	1,855,011	128,297,800	2,633,624
Other British West				
Indies	77,723,500	1,973,617	43,180,600	934,441
Cuba	33,050,200	413,906	10,778,800	136,248
Fi ii islands	92,620,700	3,028,754	108,275,000	2,623,237

Table 12. - Imports for Consumption by Gountries, Calendar Years 1930 and 1931. - Cont'd.

	193	0	1931		
Articles by Countries	Quantity	Value	Quantity	Value	
Sugar, n.o.p., not above No. 16 D.S. in colour, etc Conted.		\$		\$	
Peru Lb.	15,563,700	267,746	-	edis	
San Domingo	27,869,200	363,898	40,855,300	513,817	
Other Countries"	994,500	13,923	3,200	66	
Sugar above No. 16 D.S. in colour, for refining purposes					
only Total Lb.	81,946,200	2,234,740	132,458,800	2,837,397	
Australia "	11,101,000	304,158	29,056,200	597,339	
British East Africa "	61,435,100	1,717,367	45,994,500	1,033,023	
British South Africa "	-	6,23	39,176,900	816,828	
British Guiana"	5,400,500	1.24,590	50,000	1,120	
Jamaica	4,009,600	88,625		-	
Fiji Islands "	-	010	15,941,900	345,197	
Trinidad and Tobago "	-	-	2,239,300	43,890	
Sugar above No. 16 D.S. in colour and all refined					
sugars Total Lb.	50,812,600	1,402,808	20,706,000	547,411	
United Kingdom	9,100	715	323,500	10,244	
United States"	5,931,000	253,115	3,241,500	138,420	
Belgium	3,347,400	102,638	- 1	- 11	
Cuba "	40,871,600	1,025,884	12,739,500	270,570	
Czecho-Slovakia	300,000	7,500	3,070,000	76,850	
Netherlands	100,000	6,154	560,100	34,999	
Hong Kong	3,000	107	604,100	12,085	
Other Countries	250,500	6,695	167,300	4,243	
Invert sugar and syrups, the					
product of the sugar cane or beet and all imitations and					
substitutes thereof . Total Lb.	648,700	26,964	796,900	14,716	
United Kingdom	0409.00	~ ~	2,200	118	
United States	648,700	26,964	794,700	14,598	
Molasses of cane, testing under 350 but not less than 200					
Total Gal.	1,886,562	198,431	4,879,971	341,622	
United Kingdom	287	918	en e 10 2 m	073 000	
United States"	1,886,275	197,513	3,546,171	271,680	
British Guiana	483	64	640,000	31,680	
Trinidad and Tobago"		ran	566,667	28,050	
Other Countries "		65	127,133	10,212	

Table 12 - Imports for Consumption by Countries, Calendar Years 1930 and 1931 - Contod.

	1 9 3	Q	1931	
Articles by Countries	Quantity	Value	Quantity	Value
Molasses of cane, testing under 56°		\$		\$
but not less than 35° Total Gal.	64,009	20,884	14,216	4,578
United States "	62,662	20,643	516	149
Barbados "	1,347	241	13,700	4,429
Molasses, testing not more than 56° the produce of any British Country entitled to benefits under				
preferential tariff Total Gal.	5,490,816	1,830,560	4,480,560	1,379,994
Barbados"	5,085,332	1,725,037	3,927,841	1,220,008
Other British West Indies "	350,521	92,592	459,090	142,362
British Guiana "	54,963	12,931	93,629	17,624
Molasses and syrups of all kinds,				
the product of sugar cane or beet,				
n.o.p., and all imitations or	The state of the s		15 (2)	THE RESERVE
substitutes Total Lb.	11,146,900	372,398	2,464,200	117,055
United Kingdom	519,000	33,385	507,600	30,738
United States	10,557,000	337,201	1,895,500	84,276
Other Countries "	70,900	1,812	61,100	2,041

Table 12(a) shows a summary, by countries, of the import value of the commodities mentioned in table 12.

Table 12(a) Summary of Import Values,	by Countries,	1930 and 1931.
Countries	1930	1931
	\$	\$
United Kingdom	36,704	41,100
Australia	353,726	1,277,539
British East Africa	2,454,074	1,337,145
British South Africa	1,811,662	2,600,813
British Guiana	4,217,890	3,983,796
Barbados	4,240,404	2,835,871
Jamaica	2,300,656	1,799,205
Trinidad and Tobago	1,861,551	2,705,564
Other British West Indies	2,059,321	1,076,803
Fiji Islands	3,028,754	2,968,434
Cuba	1,439,790	406,818 12,085
San Domingo	363,929	513,817
United States	880,209	509,123
Peru	267,746	
Netherlands	6,154	34,999
Belgium	102,638	The state of the s
Czecho Slovakia	7,500	76,850
All other Countries	1.8, 297	16,562
Total Value of Imports	25,451,112	22,196,524

Exports

The exports of sugar, etc., are shown in table 13 for the calendar years 1930 and 1931. The total value of the exports in 1931 amounted to \$878,286, a decrease of \$665,935 as compared with the previous year. Sugar of all kinds, valued at \$728,825 was the principal item of export, of which \$560,525 or almost 77 per cent went to Newfoundland.

Table 13. - Exports of Canadian Produce for Calendar Years 1930 and 1931.

Articles by Countries		1930		1931	
		Quantity	Value	Quantity	Value
			\$		\$
Sugar of all kinds, n.o.p. Total Lk	b.	21,815,000	1,025,073	14,938,400	728,825
United States 1	11	403,600	20,167	4,600	309
British Guiana t	n	442,100	20,703	99,900	5,041
British Honduras	TT .	1,545,700	73,835	2,075,700	99,095
British South Africa	11	-	-		
Bermuda	11	261,700	7,242	16,100	894
Barbados	11	266,800	10,772	23,500	1,510
Jamaica	11	909,500	42,780	78,800	3,976
Trinidad and Tobago	li .	475,700	16,803	80,500	4,96
Other British West Indies . '	11	1,825,700	86,993	846,600	40,478
Newfoundland	11	14,757,900	714,872	11,473,200	560,52
Norway	t1	268,800	6,720		-
St. Pierre and Miquelon	31	513,200	19,370	239,200	12,018
Other Countries	11	144,300	4,816	300	1.
Molasses and syrups of all.	al.	2,314,325	230,802	2,030,089	11.6,26
	11	2,022,000	200,000	9,668	10,548
our oca militaria occasiono	91	2,309,692	226,672	2,019,052	104,939
	ET	4,633	4,130	1,369	77
Sugar beets Total To	on	47,551	288,346	6,115	33,19
United States	11	47,551	288,346	6,115	33,198
Total Value of Exports		wku	1,544,221	410	878,286



List of Sugar Refineries Operating in 1931.

Name

Acadia Sugar Refining Company Limited

Atlantic Sugar Refineries, Limited

Canada and Dominion Sugar Company, Limited

St. Lawrence Sugar Refineries, Limited

Canada and Dominion Sugar Company, Limited

Canada and Dominion Sugar Company, Limited

Canadian Sugar Factories, Limited

The British Columbia Sugar Refining

Company, Limited

Address

Dartmouth, N. S.

Saint John, N. B.

1410 Montmorency Street, Montreal,
Quebec.

Maisonneuve (Montreal), Quebec.

Chatham, Ontario.

Wallaceburg, Ontario.

Raymond, Alberta.

Rogers Street, Vancouver, B. C.

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000	