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

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REPORT  
on the  
SUGAR INDUSTRY  
in  
CANADA  
1925

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OTTAWA, CANADA

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THE SUGAR REFINING INDUSTRY IN CANADA, 1925

Ottawa, October 1926. Statistics of the sugar refining industry in Canada for the calendar year 1925 are presented in this report. The number of refineries reporting operations during the year shows an increase of one establishment located at Raymond, Alberta. The other plants were located as follows:- Ontario 2 (Chatham and Wallaceburg); Quebec 2, (both at Montreal); New Brunswick 1, (St. John); Nova Scotia 1 (Dartmouth) and British Columbia 1 (Vancouver). In order that there may be no disclosure of statistical information regarding individual plants these statistics are shown only for the Dominion.

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. Increases over 1924 appear in every item of the table except the cost of materials used, which is accounted for by the lower price of raw sugar in 1925.

Table 1.- Principal Statistics Compared 1921-1925.

		1925	1924	1923	1922	1921
Refineries	No.	8	7	7	7	7
Capital invested	\$	50,089,717	46,229,188	45,618,182	36,691,472	35,783,067
Employees on salaries -						
Male	No.	303	285	300	271	280
Female	No.	53	50	48	46	53
Total salaries	\$	931,333	834,178	831,107	773,366	765,456
Employees on wages -						
Male	No.	2,325	1,955	1,961	2,331	2,042
Female	No.	103	97	84	97	94
Total wages	\$	2,897,109	2,565,648	2,498,555	2,492,606	2,417,438
Cost of fuel	\$	1,815,135	1,414,339	1,510,367	1,918,987	1,810,176
Cost of materials	\$	54,457,385	55,071,573	61,817,862	56,093,942	56,882,242
Gross value of						
Products	\$	68,445,879	67,292,122	77,004,026	70,822,782	69,509,827
Value added by						
manufacture	\$	13,988,494	12,220,549	15,186,164	14,728,840	12,627,585



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 Tables 2(a) and 2(b). 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 the estimated population is shown for each year of the period covered by the report.

Table 2(a).- Production of Sugars, 1921-1925.

Kinds of Sugar	1925	1924	1923	1922	1921
Granulated sugars -					
Made from cane Lb.	970,008,781	696,756,646	718,049,089	1,006,099,197	636,446,914
Made from beets Lb.	72,819,919	85,770,709	39,423,160	29,911,770	52,862,377
Total value \$	60,093,130	59,152,471	68,990,279	63,518,155	60,185,249
Soft sugars from					
cane Lb.	128,667,990	89,100,877	84,506,388	112,093,407	94,754,353
Value of soft					
sugar \$	6,890,358	6,769,838	7,154,355	6,148,861	8,442,174
Total production					
all sugars Lb.	1,171,496,690	871,628,232	841,978,637	1,148,104,374	784,063,644
Total value, all					
sugars \$	66,983,488	65,922,309	76,144,634	69,667,016	68,627,423

Table 2(b).- Consumption of Sugars, 1921-1925.

Sugar production Lb.	1,171,496,690	871,628,232	841,978,637	1,148,104,374	784,063,644
Value \$	66,983,488	65,922,309	76,144,634	69,667,016	68,627,423
plus					
Sugar imports Lb.	17,719,936	42,926,370	17,039,979	2,654,290	20,571,959
Value \$	766,717	2,624,126	1,241,491	96,692	2,051,780
Total Lb.	1,189,216,626	914,554,602	859,018,616	1,150,758,664	804,635,603
\$	67,750,205	68,546,435	77,386,125	69,763,708	70,679,203
less					
Sugar exports Lb.	305,373,500	84,029,266	119,121,347	316,651,937	86,765,970
Value \$	19,117,527	7,412,153	12,023,173	20,566,055	7,383,245
Sugar available) Lb.	883,843,126	830,525,336	739,897,269	834,106,727	717,869,633
for consumption) \$	48,632,678	61,134,282	65,362,952	49,197,653	63,295,958
Per capita ) Lb.	94.38	90.01	81.46	93.30	81.68
consumption ) \$	5.19	6.62	7.20	5.50	7.20

Sugar Beet Production, 1921-1925.

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 3 for the calendar years 1921-1925. Acreage sown to sugar beets increased during the year by 3,692, the total yield increased by 74,870 tons and the total value of the crop by \$983,571.

Table 3.- Sugar beet production, 1921-1925.

Sugar Beet Production	1925	1924	1923	1922	1921
Area sown to sugar beets ac.	34,803	31,111	17,941	14,955	25,385
Total yield ton	370,047	295,177	159,200	127,807	199,334
Average yield per acre "	10.63	9.49	8.87	8.55	7.85
Average value per ton \$	7.27	7.36	12.51	7.56	9.90
Total value of yield \$	2,688,302	1,704,791	1,992,668	966,522	1,974,384

Production in Sugar Refineries, 1925

Table 4 gives the production of sugar and its by-products by class, quantity and selling value at the refinery for the calendar year 1925. The quantity of refined sugars produced in Canadian refineries during 1925 exceeded that of 1924 by 299,868,458 lbs. and the value by \$1,061,179. Cane sugars alone contributed 312,819,248 pounds but beet sugar decreased in quantity by 12,950,790 leaving the net production as stated above. Syrups manufactured show a decrease of 32,458 gallons and of \$28,495 in value, whilst on the other hand molasses made from cane increased by 1,162,429 gallons and from beets by 441,233 gallons and the total value by \$95,030. Of the 8 refineries reporting one showed a value of production of less than a million but this covered operations for only four months, one showed a production of less than five millions, three a production from five to under ten millions and one a product exceeding ten millions in value.

Table 4.- Sugar Production, 1925.

Classes of Products	Unit of measure	Products and	By-Products
		Quantity	Selling Value
			\$
Granulated sugars made -			
From cane	pounds	970,008,781)	60,093,130
From beets	"	72,819,919)	
Soft sugars made	"	128,667,990	6,890,358
Syrups	gallon	388,986	221,048
Molasses made -			
From cane	"	2,886,750)	642,084
From beets	"	2,283,196)	
Dried beet pulp	ton	15,394	412,566
All other by-products (value only)	-	-	186,693
Total Value of Products	-	-	68,445,879

Capital Invested

The capital invested in the sugar industry is presented by items in Table 5 for the calendar year 1925. Fixed capital including land, building, machinery and tools totalled \$32,144,498, an increase of \$1,289,998 over the preceding year, whilst working capital including materials, fuel, stocks in process, finished products and miscellaneous supplies on hand, totalled \$17,945,219 or \$2,574,531 more than in 1924. The total increase of all capital investment over 1924 was \$3,860,529, or 8.35 per cent.

Table 5.- Capital Invested in the Sugar Industry, 1925.

Items of Capital	Amount
	\$
Fixed capital (land, buildings, machinery and tools)	32,144,498
Working capital -	
Materials, fuel, stocks in process, finished products and miscellaneous supplies on hand	9,978,454
Cash, trading and operating accounts and bills receivable	7,966,765
Total Capital Invested	50,089,717



# Employment Statistics

Employment in the sugar industry for the calendar year 1925 is presented in the following series of tables.

Table 6. Employment by classes, number, sex and remuneration.

Table 7. Employment by months.

Table 8. Working time of plants and employees.

The total number of persons at employment during 1925 was 2,784 comprising 2,628 males and 156 females, an increase over 1924 of 388 males and 9 females - a total of 397 representing an increase in employment of 16.63 per cent. The cost of salaries and wages also increased from a total of \$3,399,826 in 1924 to \$3,828,442 in 1925 or 12.61 per cent. Salaries increased by \$137,372 or 11.65 per cent and wages by \$331,461 or 12.93 per cent. The average cost of salaries rose from \$2,490 in 1924 to \$2,616 in 1925 or a gain of 5.06 per cent, whilst on the other hand, the average wage declined from \$1,250 in 1924 to \$1,103 in 1925 or 11.76 per cent. The average employment per factory was 341 in 1924 as compared with 348 in 1925.

Table 6.- Employees, by classes, number, sex and remuneration, 1925.

Classes of Employment	Persons Employed		Salaries and Wages \$
	Male	Female	
Salaried employees	303	53	931,333
Wage-earners, average number	2,325	103	2,897,109
Total	2,628	156	3,828,442

The number of persons employed on wages is shown by months and sex in Table 7. The maximum of employment was reached in December with a total of 3,013 and the minimum in April with a total of 1,947. The average monthly employment during the year was 2,428, of which 2,325 were males and 103 females.

Table 7.- Employment by months, 1925.

Months	No. of Employees		Months	No. of Employees	
	Male	Female		Male	Female
January	2,105	69	July	2,500	118
February	1,878	101	August	2,354	97
March	1,865	107	September	1,978	90
April	1,847	100	October	2,758	122
May	2,452	91	November	2,853	112
June	2,415	110	December	2,891	122
Total employment during year				27,896	1,239
Average monthly employment during year				2,325	103

Working time of plants and employees is presented in Table 8. Operating time in plants is shown under three heads, (a) full time, (b) part time and (c) idle, while the working time of employees is shown under two heads - (a) hours worked per day or shift and (b) hours worked per week. The operating time of plants whether on whole or part time increased from 213.43 days in 1924 to 244.25 days in 1925. Time lost through plants being idle shows an average decrease of 30.82 days per plant as compared with the preceding year.

Table 8.- Working time of plants and employees, 1925.

Refineries reporting in 1925	8	
	Totals	Averages
Days in operation -		
On full time	1,776	222.00
On part time	178	22.25
Idle	478	59.75
Hours worked by employees -		
Per day or shift	36,474	10.33
Per week	520	65.00

### Fuel Consumption

The quantity of the classes of fuel used and the value laid down at the works is shown in Table 9 for the calendar year 1925. The principal fuels used were bituminous coal and fuel oils, both of which show large increases in quantity, the first named having increased by 41,597 tons and the last by 2,841,945 gallons. The total cost of all fuel for the year amounted to \$1,815,135 or an increase over the preceding year of \$400,796 or 28.34 per cent.

Table 9.- Fuel used by Classes. 1925.

Classes of Fuel	Unit of measure	Quantity	Cost Value delivered at works
			\$
Bituminous coal	ton	250,126	1,113,720
Anthracite coal	"	264	2,501
Coke	"	3,511	35,117
Gasoline	gallon	11,019	2,907
Oils (fuel)	"	11,730,124	660,689
Gas, artificial or natural	m.c.ft.	178	201
Total Cost of Fuel	-	-	1,815,135

### Power Installation

Power installation in the sugar industry is presented in Table 10 by classes, the number of units in each class and the horsepower according to manufacturers' rating. Primary power comprising 93 steam engines and turbines and 1 internal combustion engine totalled 11,415 horsepower. Electric motors operated by purchased power were 365 in number aggregating 7,489 horsepower and of those operated by power generated by the establishment, the number was 662 with a rated h.p. of 11,792 making a total developed electrical horsepower of 19,281. The number of boilers installed for all purposes was 73 with a rated boiler horsepower capacity of 21,446. The cost of electricity purchased was \$144,317.

Table 10.- Power installed by classes, 1925.

Classes of power	Number of units	Horsepower according to manufacturers' rating
Steam engines and turbines	93	11,410
Oil, gas and gasoline engines	1	5
Total primary power	94	11,415
Electric motors operated by purchased power	365	7,489
Total power used in manufacturing	459	18,904
Electric motors operated by power generated by the establishments	662	11,792
Total electric motor installation	1,027	19,281
Boiler installation for any purpose	73	21,446



Materials Used

The cost of materials used in the industry during 1925 is shown in Table 11, the total amounting to \$54,457,385. This is a decrease from the previous year of \$614,188 and is accounted for by a decrease in the market prices of raw cane sugar, the average price laid down at Montreal falling from \$5.655 per cwt. in 1924 to \$3.971 per cwt. in 1925. Home grown sugar beets on the contrary show an advance in cost laid down at the factory from \$5.87 per ton in 1924 to \$7.27 in 1925. This decline 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 Wholesale Prices		Increase or decrease wholesale prices
		1924	1925	
		\$	\$	\$
Refined cane sugar	Cwt.	8.323	6.250	- 2.073
Refined beet sugar	Cwt.	7.300	7.150	- .150
Soft sugar	Cwt.	7.944	5.870	- 2.074

The table itemizes the various materials used by quantity and cost value, delivered at the works. Raw materials constituted 91.3 per cent of the total cost, whole or partly manufactured materials 2.8 per cent and containers of all kinds 5.9 per cent.

Table 11.- Cost of Materials, 1925.

Kinds of Materials	Unit of measure	Quantity	Cost Value delivered at works
			\$
Raw cane sugar	pounds	1,165,310,168	47,025,265
Sugar beets	ton	370,047	2,688,302
Boneblack purchased	pounds	2,477,431	99,673
Infusorial earth	pounds	2,166,343	57,755
Lime	pounds	3,098,386	15,473
Limestone	ton	26,044	59,539
Other chemicals (sulphur, sulphuric acid, lead acetate, etc.)	-	-	58,150
Boxes, bags and other containers (value only)	-	-	3,193,216
All other materials (value only)	-	-	1,260,012
Total Cost of Materials	-	-	54,457,385



## Imports and Exports

Table 12 deals with the importation for consumption in Canada of the under-mentioned commodities by countries, quantity and value. The total value of imports of sugars and molasses during the calendar year 1925 was \$37,185,797. A summary by countries and values is given at the foot of this table.

Table 12.- Imports for Consumption by Countries, calendar year, 1925.

Articles by Countries		Quantity	Value \$
Sugar raw, n.o.p. not above No. 16 D.S. in colour etc. Total	Lb.	1,171,067,379	33,744,861
United States	"	60,444,558	1,626,175
Australia	"	4,624,537	258,913
British Guiana	"	140,449,957	4,799,049
Barbados	"	75,366,335	2,566,463
Jamaica	"	63,362,824	2,147,852
Trinidad and Tobago	"	25,031,868	850,062
Other British West Indies	"	17,675,945	614,821
Cuba	"	453,767,079	11,262,997
Fiji Islands	"	56,622,031	1,904,904
Hayti	"	4,937,936	130,162
Honduras	"	23,398,610	582,143
Peru	"	15,723,436	442,540
San Domingo	"	216,167,579	5,882,293
Other Countries	"	13,494,684	676,487
Sugar above No. 16 D.S. and all refined sugar of whatever grade or standard	"	17,719,936	766,717
United Kingdom	"	318,811	19,656
United States	"	10,732,741	503,856
Barbados	"	519,688	17,694
Jamaica	"	645,654	24,999
Dutch East Indies	"	171,695	8,489
Guatemala	"	1,683,094	56,439
Hong Kong	"	5,697	290
Nicaragua	"	1,748,700	54,746
Other Countries	"	1,893,586	80,548
Sugar cane, shredded	-	-	4,595
United States	-	-	1,861
Other Countries	-	-	2,734
Glucose, glucose syrup and corn syrup or any admixture thereof	Lb.	2,460,606	103,385
United Kingdom	"	40,858	3,008
United States	"	2,419,748	100,377
Molasses of cane testing under 35° but not less than 20°	Gal.	103,387	41,388
United States	"	103,387	41,388
Molasses produced from the manufacture of cane sugar, etc. testing not less than 35° not more than 56°	Gal.	11,232	6,150
United States	"	7,213	4,768
Other Countries	"	4,019	1,382
Molasses, testing not more than 56° the produce of any British Country entitled to benefits under preferential tariff, etc.	Gal.	5,143,631	2,256,025
Barbados	"	4,736,914	2,120,162
Trinidad and Tobago	"	25,097	6,955
Other British West Indies	"	303,660	111,271
Other Countries	"	77,960	17,637
Molasses and syrups of all kinds the product of sugar cane or beet h.o.p. and all imitations or substitutes	Lb.	9,735,028	262,558
United Kingdom	"	540,480	47,434
United States	"	9,182,053	214,774
Other Countries	"	6,495	350
Molasses testing over 56°	"	3,333	118
United States	"	3,333	118





Imports and Exports - Cont'd.

Table 12.- Imports for consumption by countries, calendar year 1925. Cont'd.

Articles by Countries	Quantity	Value \$
Summary of import values by countries -		
United Kingdom		70,098
United States		2,453,317
British West Indies		8,460,279
British Possessions		6,963,156
Cuba		11,262,997
San Domingo		5,882,293
Honduras		582,143
Hayti		130,162
Peru		442,540
Guatemala		56,439
All Other Countries		842,373
Total Value		37,185,797

The exports of Canadian produce are presented by countries, quantity and value in Table 13 for the calendar year 1925. The total value of goods the produce of Canada exported was \$19,541,224, of which the United Kingdom took \$16,931,976 or 86.6 per cent. The principal item of export was sugar of all kinds valued at \$19,117,527, representing nearly 98 per cent of the total value of all exports.

Table 13.- Exports of Canadian Produce for calendar year 1925.

Articles by Countries		Quantity	Value \$
Sugar of all kinds, n.o.p.	Lb.	305,373,500	19,117,527
United Kingdom	"	269,352,900	16,876,488
United States	"	500	35
Belgium	"	2,527,800	128,813
Bermuda	"	12,500	726
British Guiana	"	901,500	54,322
British Honduras	"	967,600	61,755
Barbados	"	983,700	57,292
Jamaica	"	1,289,900	84,436
Trinidad and Tobago	"	1,774,000	117,993
Other British West Indies	"	817,100	48,900
France	"	873,600	53,174
Newfoundland	"	6,255,700	392,454
Norway	"	4,412,000	267,574
St. Pierre and Miquelon	"	314,700	19,792
Uruguay	"	8,226,000	506,919
Netherlands	"	112,000	6,910
Other Countries	"	6,552,000	439,944
Molasses and syrups of all kinds	Gal.	1,168,307	109,565
United States	"	1,166,655	108,647
Other Countries	"	1,652	918
Sugar house syrup	Gal.	848	260
United States	"	848	260
Glucose and glucose syrup	-	-	55,504
United Kingdom	-	-	55,488
United States	-	-	16
Sugar beets	Ton	43,028	258,368
United States	"	43,028	258,368
Summary of export values by countries			
United Kingdom			16,931,976
United States			367,326
British Possessions			508,531
British West Indies			309,347
Belgium			128,813
France			53,174
Norway			267,574
St. Pierre-Miquelon			19,792
Uruguay			506,919
Netherlands			6,910
Other Countries			440,862
Total Value of Exports			19,541,224

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