CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

REPORT

on the

LINSEED OIL INDUSTRY

in

CANADA

1929

Published by Authority of the Hon. James Malcolm, M.P.,
Minister of Trade and Commerce

OTTAWA

1930

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

OTTAWA, CANADA

Dominion Statistician: R. H. Coats, B.A., F.S.S., (Hon.), F.R.S.C.
Chief, Census of Industry: J. C. Macpherson.

REPORT ON THE LINSEED OIL INDUSTRY IN CANADA, 1929

Ottawa, May, 1930. The statistics of the Linseed Oil Industry in Canada for the calendar year 1929 are presented in this report. The number of individual plants operating during the year was 8 located by provinces as follows: Quebec 3, Ontario 2, Manitoba 2, and Alberta 1. In order that information relating to individual plants may not be disclosed the statistics by provinces are omitted and only those for the Dominion given throughout the tables of this report.

Principal Statistics

A comparative summary of the principal statistics of the industry is presented in Table 1, for the calendar years 1928 and 1929,

Table 1. Principal Statistics compared 1928 and 1929.

Items		1928	1929
Establishments reporting	No.	8	8
Capital Investment	$	2,394,331	2,708,387
Employees on salaries-			
Male	No.	32	29
Female	No.	5	7
Total salaries	$	90,267	94,806
Employees on wages -			
Male	No.	197	202
Female	No.	1	1
Total wages	$	232,304	232,414
Cost of fuel and electricity	$	59,815	63,658
Power equipment			
Units	No.	116	106
H.P. capacity	H.P.	1,997	1,863
Cost of materials	$	5,514,568	5,578,539
Gross value of products	$	6,281,055	6,502,633
Net value of products	$	766,487	924,094

Production Statistics, 1929.

The quantity and the selling value at the mill or factory of the various commodities manufactured in the Dominion during the calendar years 1928 and 1929 are shown in Table 2. Decreases occurred in the quantity of Linseed Oil, boiled and raw, oil cake and oil cake meal, whilst special refined oils alone show an increase as in the summary table below.

Products		1928	1929	+ Increase - Decrease
Linseed Oil, raw	Imp. Gals.	3,388,583	3,295,255	- 93,328
Linseed oil, boiled	" "	1,067,770	1,047,646	- 20,124
Oil cake	Tons	4,714	2,607	- 2,107
Oil cake meal	"	42,192	41,326	- 866
Special refined oils	Imp. Gals.	754,258	892,582	+ 138,324

Size of Establishments, 1929

In view of the tendency towards concentration in industrial enterprises, a series of tables has been prepared presenting in a threefold way the size of establishments in the industry measured by (a) capital investment, (b) gross value of production and (c) employment, all within certain specified groups or limitations for the calendar years1928 and 1929. The tables further indicate the movement of capital, production and employment within the industry.

In 1928, the number of establishments reporting was 8, with a total capital investment of $2,394,331, a total gross value of production of $6,281,055 and a total employment of 235. Of the total number of establishments 6 had a capital investment of $2,218,097 or 92.7 per cent of the total investment and an average investment of $369,683 per establishment; 6 establishments had a gross value of production amounting to $5,435,687 or 86.5 per cent of the total production and an average production of $905,948 per establishment. In employment 7 establishments had 220 persons on their payroll or 93.7 per cent of the total number employed and an average employment of 31 per establishment.

In 1929, the number of establishments reporting was 8 with a total capital investment of $2,708,387, a total gross value of production of $6,502,633 and a total employment of 239. Of the total number of establishments 6 had a capital investment of $2,515,771 or 92.90 per cent of the total investment with an average investment of $419,295 per establishment. In gross value of production 6 establishments had a total production of $5,736,618 or 88.23 per cent of the total for the industry and an average production of $956,103 per establishment. In employment 7 establishments had a total payroll of 224 or 93.72 per cent of the total number employed and an average employment of 32 per establishment.

(a) Capital invested in establishments grouped according to value, 1928 and 1929.

Groups of value of capital	1928			1929		
	Establishments	Capital invested	Average capital	Establishments	Capital invested	Average capital
	No.	$	$	No.	$	$
Under $200,000	2	176,234	88,117	2	192,616	96,308
$200,000 and over	6	2,218,097	369,683	6	2,515,771	419,295
TOTAL	8	2,394,331	299,291	8	2,708,387	338,548

(b) Gross value of production in establishments grouped according to value, 1928 and 1929

Groups of value of Production	1928			1929		
	Establishments	Gross Value of Production	Average Value of Production	Establishments	Gross Value of Production	Average Value of Production
	No.	$	$	No.	$	$
$200,000 to under $500,000	2	845,368	422,684	2	766,015	383,008
$500,000 and over	6	5,435,687	905,948	6	5,736,618	956,103
TOTAL	8	6,281,055	785,132	8	6,502,633	812,829

(c) Employees in establishments grouped by number, 1928 and 1929.

Groups of employees	1928			1929		
	Establishments	Total Employees	Average Employees	Establishments	Total Employees	Average Employees
	No.	No.	No.	No.	No.	No.
Under 20 employees	1	15	15	1	15	15
20 to under 60 employees	7	220	31	7	224	32
TOTAL	8	235	29	8	239	30

REPORT ON THE LINSEED OIL INDUSTRY IN CANADA, 1929.

When values of production are compared increases appear in oil cake meal of ($185,503), special refined oils of ($177,411). The items of production showing decreases in value were raw linseed/oil ($51,970), boiled/linseed oil of ($5,013) and oil cake of ($74,286). The net increase in value of production over 1928 amounted to $231,445 exclusive of by-products amounting in value to $7,198.

Table 2. Production, by Quantity and Value, 1929.

Classes of Products	Unit of Measure	Quantity	Selling Value at Mill
			$
Linseed oil, raw	Imp. Gal.	3,295,255	2,637,581
Linseed oil, boiled	" "	1,047,646	837,070
Refined and special oils	" "	892,582	855,520
Oil cake	Ton	2,607	123,928
Oil cake meal	"	41,326	2,041,336
All other products	-	-	7,198
Total value of products	-	-	6,502,633

Capital Investment

The amount of capital invested in the linseed oil industry in Canada is shown in Table 3, under two heads:- Fixed capital which includes land, buildings, machinery and tools and working capital which comprises materials and supplies on hand, stocks in process, finished products on hand and cash, trading and operating accounts, etc. Fixed capital shows an increase of $13,705 when compared with 1928. Working capital also shows an increase amounting to $300,351 over the amount reported for the previous year, which added to fixed capital makes a total increase in capital investment of $314,056.

Table 3. Capital invested, by Provinces, 1929.

Items of Capital	Canada	Quebec	Other Provinces
	$	$	$
Fixed capital -			
Lands, building etc.) Machinery and tools)	1,358,842	691,144	667,698
Working capital -			
Materials and stocks on hand	702,162	290,004	412,158
Cash, trading and operating accounts etc.	647,383	353,377	294,006
Total working capital	1,349,545	643,381	706,164
Grand Total of Capital	2,708,387	1,334,525	1,373,862

REPORT ON THE LINSEED OIL INDUSTRY IN CANADA, 1929.

Employment Statistics

Statistics of employment for the calendar year 1929 are shown under the three following heads:- (a) Employees by sex and remuneration (b) employees by months and (c) working time of plants and employees. Table 4 presents statistics of employment by classes sex and remuneration by provinces. Compared with 1928 there was an increase in the total number employed in the industry of 4 and an increase of $4,449 in the payments for salaries and wages.

Table 4. Employees, Salaries and Wages, by Provinces, 1929.

Classes of employees by sex		Canada	Quebec	Other Provinces
Salaried employees -				
Male	No.	29	11	18
Female	No.	7	3	4
Total salaries	$	94,806	51,491	43,315
Employees on wages, average No.-				
Male	No.	202	104	98
Female	No.	1	1	-
Total wages	$	232,414	120,655	111,759
Total male employees	No.	231	115	116
Total female employees	No.	8	1	4
Total salaries and wages	$	327,220	172,146	155,074

Employment by months:- The number of persons entered on the payroll during each month of the year is shown by sex in Table 5. The months of highest employment were November, to March and those of lowest employment April to September. The average monthly employment was 203 of which males numbered 202 and females 1. This represents an increase in the monthly average employment of 5 when compared with 1928.

Table 5. Employment by Months, 1929.

Months	No of Employees		Months	No. of Employees	
	Male	Female		Male	Female
January	206	1	July	195	1
February	208	1	August	205	1
March	207	1	September	188	1
April	199	2	October	201	1
May	191	1	November	209	1
June	198	1	December	203	1
		Total employment during year		2,410	13
		Average employment per month		202	1

Working time:- Table 6 shows the operating time of plants under three heads (a) full time, (b) part time and (c) idle, and also the average hours of labour worked by employees per day or shift and per week. The average operating time of plants in the industry whether on full or part time was 277.88 days and the average hours of labour were 9.39 per day and 54.94 per week.

Table 6. Working time of Plants and Employees, 1929.

Number of plants reporting	8	
	Total	Average
Days in operation		
on full time	1,914	239.25
on part time	309	38.63
idle	209	26.12
Working time of employees		
Hours worked per day or shift	1,906	9.39
Hours worked per week	11,152	54.94

Other Employment Statistics

The number and percentage of wage-earners in months of highest employment working specified hours per day is shown in Table 7 for the Dominion as a whole. For the Dominion, the number working specified hours was distributed among the classes, the percentage working 8 hours being highest, with 32.30 per cent of the total employment,

Table 7.- Hours worked by wage-earners in month of highest employment, 1929.

	Wage-earners in month of highest employment working per day of				Percentages of wage-earners working per day of			
	8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
	No.	No.	No.	No.	p.c.	p.c.	p.c.	p.c.
CANADA	73	44	52	57	32.30	19.47	23.01	25.22

The number of hours worked per day in the month of highest employment and the standard working hours per week are shown for the Dominion in Table 8. It should be noted that whilst the statistics relating to hours of labour in columns 1, 2 and 3 are based on figures compiled for the month of highest employment, those in columns 4 and 5 represent the total and average of standard weekly hours of labour for the number of establishments reporting to the Bureau. For this reason the relation between daily and weekly hours of labour is to some extent impaired. The average daily hours of labour on the above basis was for the Dominion 9.29, whilst the average standard weekly hours worked out at 54.94 per plant.

Table 8. - Hours of Labour per day and per week in month of highest employment 1929.

	Total daily hours and number of wage-earners in month of highest employment			Standard working hours per week	
	Total Hours	Total Wage-earners	Average hours per day per wage-earner	Total	Average
	No.	No.	No.	No.	No.
CANADA	2,099	226	9.29	11,152	54.94

Fuel Consumption

The quantity and cost value of the fuel consumed by the industry during the year is shown in Table 9, by classes. The total cost of fuel was $21,566 and of this total bituminous coal accounted for $16,369 or nearly 76 per cent.

Table 9. Fuel used, by Classes, 1929.

Classes of fuel		Quantity	Cost Value at Mill or Factory
Bituminous coal	Ton	2,773	16,369
Lignite coal	"	631	3,381
Gasoline	Gal.	1,010	249
Gas, natural	m.c.ft.	5,303	389
Wood	Cord	150	1,100
All other	-	-	78
Total cost of fuel		-	21,566

Power Installation

The power installed in the industry in 1929 is shown by kind, number of units and horse-power according to manufacturers rating in Table 10, Primary power installation was represented by 2 units of steam engines with a total rated h.p. capacity of 20 and 3 hydraulic turbines or water wheels of 100 horse power. Secondary power was represented by 101 motors of a rated h.p. capacity of 1,743. The cost of electricity purchased during the year was $42,092. The number of boilers installed was 9 with a rated h.p. capacity of 720.

Table 10. Power installed, 1929.

Kinds of Power	Number of Units	Horse-power according to manufacturers' rating
Steam Engines and Turbines	2	20
Hydraulic turbines or water wheels	3	100
Total primary power	5	120
Electric motors operated by purchased power	101	1,743
Total power used in manufacturing	106	1,863

Materials Used.

The various items of materials used in the industry is given by provinces in Table 11, for the calendar year, 1929.

Table 11. Materials used by provinces, 1929.

Principal Materials	CANADA	
	Quantity Bushels	Cost Value $
Flaxseed	2,466,881	5,316,903
Containers, etc.	-	102,685
All other materials	-	158,951
TOTAL	-	5,578,539

REPORT ON THE LINSEED OIL INDUSTRY IN CANADA, 1929.

IMPORTS AND EXPORTS

Imports of flax seed, oils and oilcake and meal, for consumption in Canada are shown in Table 12, by quantities and values and by principal countries for the calendar year 1929. The total value of imports for consumption in Canada rose from $628,673 in 1928 to $2,877,692 in 1929, whilst exports decreased from $6,654,352 in 1928 to $3,145,541 in 1929. According to the "Monthly Bulletin of Agricultural Statistics" the production of flax seed in Canada fell from 3,614,400 bushels valued at $5,758,000 in 1928 to 2,060,400 bushels valued at $4,898,000 in 1929, a decrease of 1,554,000 bushels and $860,000 in value.

Table 12. Imports and Exports of Flaxseed Linseed Oil and Oilcake and Meal, 1929.

Articles by Countries		Imports		Exports	
		Quantity Lb.	Value $	Quantity Gal.	Value $
Flax or linseed oil boiled or raw -		1,341,748	129,068	1,995	2,024
United Kingdom		962,074	80,915	-	-
United States		320,301	45,519	10	10
Other Countries		59,373	2,634	1,985	2,014
Flaxseed, n.o.p.	Bush.	1,374,272	2,722,822	848,831	1,869,981
United Kingdom		-	-	-	-
United States		70,301	128,822	848,831	1,869,981
Argentine		1,282,279	2,537,593	-	-
Other Countries		21,692	56,407	-	-
Linseed oilcake and meal -	Cwt.	11,068	25,802	510,321	1,273,536
United Kingdom		-	-	2,240	6,120
United States		11,068	25,682	414,650	1,033,086
British West Indies		-	-	38,515	99,505
Netherlands		-	-	52,930	129,603
Other Countires		20	120	1,986	5,222
Grand Total, Value of Imports and Exports		-	2,877,692	-	3,145,541

Consumption of Flaxseed, Linseed Oil and Oilcake, 1929.

The consumption of the commodities referred to in the foregoing table is shown in Table 13. In order to compare the statistics of linseed oil, the quantity imported has been converted into gallons at the rate of 9.35 lb. to the gallon of a stated specific gravity, whilst the production of flax seed is representative of the crop of 1928.

Table 13. Consumption of Flaxseed, Linseed Oil and Oilcake and Meal, 1929.

	Flaxseed		Linseed oil, boiled or raw		Oilcake and Meal	
	Quantity Bush.	Value $	Quantity Gallons	Value $	Quantity Ton	Value $
Production	3,614,400	5,758,000	4,342,901	3,474,651	43,933	2,165,264
Imports	1,374,272	2,722,822	143,502	129,068	553	25,802
TOTAL	4,988,672	8,480,822	4,486,403	3,603,719	44,486	2,191,066
Less Exports	848,831	1,869,981	1,995	2,024	25,516	1,273,536
Available for Consumption	4,139,841	6,610,841	4,484,408	3,601,695	18,970	917,530

APPENDIX

Firms engaged in the Linseed Oil Industry in Canada

1929.

Canada Linseed Oil Mills, Ltd.,	2210 Notre Dame St. E. Montreal, Que.
Dominion Linseed Oil Co. Ltd.,	837 Mill St., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd.,	2875 Centre St., Montreal, Que.
Dominion Linseed Oil Co. Ltd.,	Baden, Ontario
Canada Linseed Oil Mills, Ltd.,	40 Wabash Avenue, Toronto, 3, Ont.
Dominion Linseed Oil Co. Ltd.,	St. Boniface, Manitoba
Sherwin-Williams Co. of Canada Ltd.,	110 Sutherland St., Winnipeg, Manitoba
Alberta Linseed Oil Co. Ltd.,	Medicine Hat, Alberta.