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#### CANADA

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

GENERAL MANUFACTURES BRANCH

REPORT

ON THE



LINSEED & SOYBEAN OIL INDUSTRY

IN

CANADA







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

Dominion Statistician: Chief, General Manufactures Branch: R. H. Coats, LL.D., F.R.S.C., F.S.S.(Hon.) A. Cohen. B.Com.

## THE LINSEED AND SOYBEAN OIL INDUSTRY IN CANADA, 1937.

In 1937 there were eleven plants in operation, located by provinces as follows: Quebec, 5; Ontario, 3; Manitoba, 2; and Alberta, 1. These plants reported a capital investment in fixed and current assets of \$2,450,557 and furnished employment to 242 persons who were paid \$293,443 in salaries and wages. They also spent \$4,099,823 for materials, fuel and electricity and produced goods with a selling value at the factory of \$5,049,528, leaving a value added by manufacture of \$949,705.

Linseed oil is the principal item of production, the output in 1937 amounting to 4,675,430 gallons valued at \$3,476,900. This is followed by oilcake meal with an output of 39,730 tons and a value of \$1,374,673. Detailed statistics of production for 1937 and 1936 are given in Table 3.

Continued expansion characterized the operations of the Linseed Oil Industry in 1937. Compared with the previous year, there was an increase of \$947,746 or 23.1 per cent in the gross value of production and \$184,188 or 24.0 per cent in the value added by manufacture. Employment was furnished to 23 more persons with an increase of \$33,703 in salaries and wages paid. The volume of production in 1937 was again considerably higher than in the previous year. Compared with 1936 there was an increase of 522,104 gallons in the output of raw linseed oil with an increase of \$436,195 in its selling value. Increases were also reported in the production of special linseed oil and oilcake meal. The former was 28,115 gallons and the latter 4,949 tons higher. Of particular significance is the increase in value of \$59,416 in the output of soybean products which amounted to \$110,931 in 1957.

Flaxseed comprises the most important material used by this industry and accounted for 95 per cent of the total value of materials used. Of the 2,245,846 bushels of flaxseed used, 1,274,832 bushels were of foreign origin and 971,014 of domestic origin. The consumption of domestic flaxseed declined from 54 per cent of the total in 1936 to 43 per cent in 1937.

Detailed statistics of production, capital invested, employment, materials used, imports and exports, etc., are given in the tables following.

Table 1. - Principal Statistics, 1922-1937.

No.       \$       \$       \$         1922       8       2,603,241       251       303,465       4,719,555       5,558,627         1923       8       2,818,291       249       299,906       4,697,051       5,761,840         1924       8       2,231,954       217       286,977       4,851,264       5,911,530         1925       8       2,490,462       213       280,846       4,876,825       6,005,969         1926       8       2,691,550       231       282,632       5,364,364       6,486,924         1927       8       2,341,733       239       308,602       4,840,168       5,839,214         1928       8       2,594,331       235       322,771       5,514,568       6,281,055         1929       8       2,708,387       239       327,220       5,578,539       6,502,633         1930       8       3,426,727       250       325,564       6,476,883       7,410,423         1931       8       2,690,475       226       299,377       2,989,123       3,951,761         1932       9       2,821,849       218       280,057       2,162,862       2,852,881         1933       10<		Estab- lish- ments	Capital Invested	Em- ployees	Salaries and Wages	Cost of Materials Used	Gross Value of Products <sup>x</sup>
1923       8       2,818,291       249       299,906       4,697,051       5,761,840         1924       8       2,231,954       217       286,977       4,851,264       5,911,530         1925       8       2,490,462       213       280,846       4,876,835       6,005,969         1926       8       2,691,550       231       282,632       5,364,364       6,486,924         1927       8       2,341,733       239       308,602       4,840,168       5,839,314         1928       8       2,394,331       235       322,771       5,514,568       6,281,055         1929       8       2,708,387       239       327,220       5,578,539       6,502,633         1930       8       3,426,727       250       325,564       6,476,883       7,410,433         1931       8       2,690,475       226       299,377       2,989,123       3,951,761         1932       9       2,821,849       218       280,057       2,162,862       2,852,881         1933       10       3,022,676       201       222,759       1,542,119       2,086,557         1934       10       2,394,498       200       239,411       1,996,		No.	*	No.	\$	\$	\$
1936     10     2,544,705     219     259,740     3,279,241     4,101,782       1937     11     2,450,557     242     293,443     4,036,075     5,049,528	1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1932 1933 1935	8 8 8 8 8 8 8 8 9 10 10 8	2,818,291 2,231,954 2,490,462 2,691,550 2,341,733 2,394,331 2,708,387 3,426,727 2,690,475 2,821,849 3,022,676 2,394,498 2,228,003 2,544,705	249 217 213 231 239 235 239 250 226 218 201 200 194 219	299,906 286,977 280,846 282,632 308,602 327,220 327,220 325,564 299,377 280,057 222,759 239,411 235,347 259,740	4,697,051 4,851,264 4,876,875 5,364,364 4,840,168 5,514,568 5,578,539 6,476,883 2,989,123 2,162,862 1,542,119 1,996,802 2,365,776 3,279,241	5,761,840 5,911,530 6,005,969 6,486,924 5,839,214 6,281,055 6,502,633 7,410,423 3,951,761 2,852,881 2,086,557 2,644,074 3,068,776 4,101,782

x Selling value at the factory,

Table 2. - Principal Statistics Compared, 1936 and 1937.

		4	the state of the s
Items	1937	1936	t Increase - Decrease
Establishments reporting No.	11	10	1
Capital invested\$	2,450,557	2,544,705	- 94,148
Employees on salaries -			
Male No.	36	31	+ 5
Female No.	7	7	draja
Total salaries\$	93,730	91,360	+ 2,370
Employees on wages -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,
Male No.	198	181	+ 17
Female No.	1	-	+ 1
Total wages\$	199,713	168,380	+ 31,333
Power equipment -			
Units No.	138	133	+ 5
Horse power capacity H.P.	2,183	2,084	+ 99
Cost of fuel and electricity \$	63,748	57,024	+ 6,724
Cost of materials used	4,036,075	3,279,241	+ 756,834
Gross value of products \$	5,049,528	4,101,782	+ 947,746
Value aded by manufacture \$	949,705	765,517	+ 184,188

Table 3. - Production, by Quantity and Value, 1936 and 1937.

	1 9	5 7	1956		
Classes of Products	Unit of Measure	Quantity	Selling Value at Mill	Quantity	Selling Value at Mill
(Company) - Speciment - Specim			\$		8
Linseed oil, raw Linseed oil, boiled Linseed oil, special Linseed oilcake Linseed oilcake meal Linseed meal Soybean products X Soap All other products	Gallon " Ton " Pound Pound	2,839,097 767,425 1,068,908 1,519 39,730 195 3,454,405 451,199	2,026,532 580,765 869,603 50,091 1,374,673 18,247 110,931 16,174 2,512	2,316,993 767,420 1,040,793 2,000 34,781 185 1,588,179 445,171	1,590,337 552,291 799,262 56,525 1,014,686 17,133 51,515 20,033
TOTAL VALUE OF PRODUCTS	***	45	5,049,528		4,101,782

x Includes soybean oil, soybean meal and soybean flour.

Table 4. - Materials Used. 1936 and 1937.

Table 43 madel Later Oberg Total Court							
	Unit of	1 9	5 7	1936			
Principal Materials	Measure	Quantity	Cost Value at Mill	Quantity	Cost Value		
		for the the Additional Section of the Section of th	\$		6		
Flaxseed, Canadian Flaxseed, imported Press and filter cloth Chemicals, (fullers' earth, clarex earth, sulphuric acid, caustic	Bushel #	971,014 1,274,832	1,606,558 2,233,358 30,580	1,070,596 914,729	1,686,347 1,426,777 23,034		
soda and potash) Containers, etc All other materials X	Pound	382,976 	15,277 67,103 83,199	393 <b>,</b> 277 -	15,833 87,686 39,564		
TOTAL COST OF MATERIALS		-	4,036,075	-	3,279,241		

x Includes cost of soybeans.

#### Size of Establishments

A series of tables has been prepared presenting in a three fold way the size of establishments in the industry measured by (a) capital investment, (b) gross value of production and (c) employment. The tables when compared for a number of years indicate the movement of capital, production and employment within the industry.

In 1937 the number of establishments reporting was eleven with a total capital investment of \$2,450,557, a total gross value of production of \$5,049,528, and a total employment of 242. Of the total number of establishments, three had a capital investment of \$1,221,835 or almost 50 per cent of the total investment, with an average investment of \$407,278 per establishment. In gross value of production, seven establishments had a total production of \$4,783,195 or almost 95 per cent of the total for the industry and an average production per establishment of \$683,314. In employment, five establishments had a total payroll of 180 or over 74 per cent of the total number employed and an average employment of 36 persons per establishment.

Table 5(a). - Capital Investment.

Establishments		1937	The second secon	1936		
having a Capital Investment of:	Estab- lish- ments	Capital Invested	Average Capital per Estab- lishment	Estab- lish- ments	Capital Invested	Average Capital per Estab- lishments
	No.	\$	\$	No.	\$	\$
Under \$300,000 \$300,000 and over .	8 3	1,228,722 1,221,835	153,590 — 407,278	6 4	934,980 1,609,725	155,830 402,431
TOTAL AND AVERAGE .	11	2,450,557	222,778	10	2,544,705	254,470

Table 5(b). - Production.

	1937				1936			
Establishments having a Production of:	Estab- lish- ments	Total Pro- duction	Average Production per Estab- lishment	Estab- lish- ments	Total Pro- duction	Average Production per Estab- lishment		
Under total and		000 777	*		"	Ψ -		
Under \$250,000 \$250,000 and over .	7	266,333 4,783,195	66,583 683,314	6	401,256 3,700,526	100,314 616,754		
TOTAL AND AVERAGE .	11	5,049,528	459,048	10	4,101,782	410,178		

Table 5(c). - Employees.

	1937			1936		
Establishments having an average employment of:	Estab- lish- ments	Total Employees	Average Employees per Estab- lishment	Estab- lish- ments	Total Employees	Average Employees per Estab- lishment
	No .	No.	No.	No.	No.	No.
Under 20 employees 20 employees and	6	62	10	6	74	12
over	5	180	36	4	145	36
TOTAL AND AVERAGE .	11	242	22	10	219	22

Table 6. - Capital Investment, 1936 and 1937.

Items of Capital	1937	1936
Fixed Capital - Present value of land, buildings, etc	1,202,445	\$ 1,223,236
Working Capital - Inventory value of materials and supplies on hand, stocks in process and finished products on hand Operating capital (cash, bills receivable, etc.)	878,095 370,017	957,846 363,623
TOTAL CAPITAL INVESTED	2,450,557	2,544,705

Table 7. - Employment of Wage-earners, by Months, 1937.

Months	Number of Wage-earners		Months	Number of Wage-carners		
products about the North South Southern Southern and the Southern	Male	Female	Straight allowed about a province of the state of the sta	Male	Female	
January	203 206 191 193 204 187	1 1 1 1	July	175 193 205 203 211 206	1 1 1 1 1	
			MONTHLY AVERAGE	198	1	

Table 8. - Number of Wage-earners in Month of Highest Employment whose Regular Hours per Week in 1937 were:-

Hours Worked	Number of Employees	Hours Worked	Number of
per Week		per Week	Employees
40 hours or less	6 - 15 2 103 4	51-53 hours	1 6 10 90

The above table does not include overtime.

Table 9. - Power Equipment, 1937.

Kinds of Power	Number of Units	Horse-power according to manufacturers' rating
Steam engines and turbines	7	46 150
power - In use	128	1,987
TOTAL POWER USED IN MANUFACTURING	138	2,183
Boilers - In use	9	715 100

Table 10. - Fuel and Electricity, 1937.

			Anner manufacture of the attenues were a second of the same
Kind of Fuel Used	Unit of Measure	Quantity	Cost Value at Works
registration (std. registration on the content of t	p. Di. J. Amerika, alignerine in sept. align. Tig. 100 - 11 and 1		\$
Bituminous coal	Ton	2,278	16,041
Wood	Cord	15	97
Gasoline	Gallon	540	147
Fuel oil	H	5,100	453
Gas, natural	M.cu.ft.	1,869	412
Other fuel (steam, etc.)		_	3,430
TOTAL COST OF FUEL	weeks and the same of the same		20,580
Cost of electricity purchased (including service charges)	Kw. H.	3,724,356	43,168
TOTAL COST OF FUEL AND ELECTRICITY		adds.	63,748

#### Imports and Exports

Imports and exports of flaxseed, oils, oilcake and meal are shown in tables 11 and 12 for the calendar years 1936 and 1937, by quantities and values. The total value of the imports rose from \$1,851,443 in 1936 to \$2,211,833 in 1937, and the value of the exports dropped from \$539,269 in 1936 to \$273,469 in 1937.

Table 11. - Imports of Products Made or Used by the Linseed and Soybean Oil Industry for the Calendar Years 1936 and 1987.

Articles by Countries	Unit of Measure	1937		1936	
		Quantity	Value	Quantity	Value
Plaxseed or linseed oil, boiled or raw Total	Cwt.	42,482	\$ 251,716	29,203	157,763
Flaxseed Total	Bushels	1,210,765	1,603,007	1,293,354	1,608,673
Linseed oilcake and linseed oilcake meal. Total	Cwt.	1,632	2,064	2,132	3,021
Soybean cake, meal, oil meal and flour Total	Cwt.	221,135	337,978	128,225	170,200
Soy Beans Total	Pounds	889,181	17,068	1,733,805	30,563
TOTAL VALUE OF IMPORTS		_	2,211,833		1,851,443

Table 12. - Exports of Products Made or Used by the Linseed and Soybean Oil Industry for the Calendar Years 1936 and 1937.

Articles by Countries	Unit of Measure	1937		1936	
		Quantity	Value	Quantity	Value
management and all the sea (all the sea of t			\$		*
Flaxseed or linseed oil Total	Gallons	849	820	1,590	1,370
Flaxseed for sowing Total	Bushels	12,981	68,348	8,783	46,966
Flaxseed, n.o.p Total	Bushels	166	471	171,131	270,039
Oilcake Total	Cwt.	122,791	203,830	147,021	220,894
			p and well had helt restricts approximate the new		
TOTAL VALUE OF EXPORTS	-		273,469	_	539,269

## Firms engaged in the Linseed and Soybean Oil Industry in Canada, 1937.

#### QUEBEC

The Canada Linseed Oil Mills Limited,

Continental Soya Company Ltd.,
The Dominion Linseed Oil Company Limited
Dominion Soya Industries, Ltd.
The Sherwin-Williams Company of Canada, Limited,

2210 Notre Dame Street East,
Montreal
20 Bates Road, Outremont
837 Mill Street, Montreal
2049 Harvard Ave., Montreal
2875 Centre Street, Montreal

#### ONTARIO

The Canada Linseed Oil Mills, Limited, The Dominion Linseed Oil Company Limited, Soya Mills Limited

48 Wabash Avenue, Toronto Baden 54 George St., Stratford

#### MANITOBA

The Dominion Linseed Oil Company Limited,
The Sherwin-Williams Company of Canada, Limited,

830 Archibald Street, St. Boniface 110 Sutherland Street, Winnipeg

#### ALBERTA

The Alberta Linseed Oil Company Limited,

Medicine Hat



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