

CANADA



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**THE PRAIRIE PROVINCES
IN THEIR RELATION TO
THE NATIONAL ECONOMY OF CANADA**

A Statistical Study of
Their Social and Economic Condition
in the Twentieth Century.

Dominion Bureau of Statistics

P R E F A C E

Frequent demands are made upon the Dominion Bureau of Statistics for comprehensive statistical data illustrating the course of development of different regions of Canada, particularly those having uniform economic interests. The present volume entitled "The Prairie Provinces in Their Relation to the National Economy of Canada" is the second of a series designed to meet this demand, a similar volume dealing with the Maritime Provinces having been issued some time ago.

In this study an attempt has been made to assemble the more important social and economic statistics relating to the Prairie Provinces from early times to the present, to show them in their proper relationship to similar statistics for Canada as a whole and to add certain relevant data of an interpretative and historical nature. It provides in readily available form the basic statistical data for further studies of social and economic conditions in these provinces.

This survey has been prepared by Miss Leah J. Beehler, M.A., for the most part, from materials available in the Dominion Bureau of Statistics. In certain special fields information was secured from other Government Departments or by independent research. Mr. M. C. MacLean, M.A., F.S.S. wrote the chapter on Population and Mr. J. E. Robbins, M.A. the chapter dealing with Education.

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Dominion Statistician.

Dominion Bureau of Statistics,
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THE PRAIRIE PROVINCES IN THEIR RELATION TO THE NATIONAL ECONOMY OF CANADA

CHAPTER I.—GENERAL DESCRIPTION.—PHYSIOGRAPHY AND NATURAL RESOURCES

Of Canada's total area of 3,694,863 square miles, the Prairie Provinces—Manitoba, Saskatchewan and Alberta—comprise 753,497 square miles or 20.4 p.c. Extending from 49° to 60° north latitude and from the lake of the Woods, Albany river and Hudson bay on the east to the Rocky mountains on the west, they are the provinces of the interior continental plain.

Manitoba.— Manitoba, the most easterly of the Prairie Provinces and the oldest of them in point of settlement, includes the area between Ontario on the east and Saskatchewan on the west. Its southerly limit is the International Boundary and its northerly boundary the 60th parallel of latitude and Hudson bay, where its coast of over 400 miles includes the harbour and port of Churchill. The total area of Manitoba, of which 56 p.c. lies south of the isotherm of 60°F. mean July temperature,^{1/} is 246,512 square miles—3,246 square miles greater than twice the area of the British Isles. The conformity of the surface of Manitoba is quite even; commencing on the north with a strip bordering on Hudson bay perhaps 100 miles wide and less than 500 feet in elevation, the surface rises gradually towards the west and south. The bulk of the province has an elevation of between 500 and 1,000 feet, with the greatest height of 2,727 feet attained in Duck mountain, northwest of lake Dauphin. East and north of lake Winnipeg the Precambrian formation intrudes, producing a rock formation, but the remainder of the province is overlain by very fertile soil of great depth. The treeless prairie belt extends into the south west corner of the province, but the greater portion of the developed area is in the grove belt characterized by groves of poplar interspersed with open prairie patches; to the north there are great areas of northern mixed forest, blending into the northern coniferous, which thin again to some treeless areas along the coast line farther north. The province has been regarded as typically agricultural, its southern lands, once the bed of a great inland sea, being specially adapted to this form of industry. The summers are marked by high dry temperature and an abundance of sunshine. The annual precipitation averages only 17.34 inches but of this almost 50 p.c. or an amount approximately equal to that in Ontario falls during the growing season. Manitoba's northern districts are of importance in the production of timber and also contain large mineral deposits, particularly of copper-gold ore. About three-fifths of the area of this province is underlain by the Precambrian rocks which have been found so rich in minerals in northern Ontario and Quebec. Lumbering, mining, manufacturing and commercial pursuits are gradually assuming greater importance and Manitoba has now reached a stage in its development when it no longer depends solely upon agriculture.

Saskatchewan.— The central prairie province lies between Manitoba and Alberta; it reaches to the International Boundary on the south and its northerly limit is the 60th parallel of latitude which divides it from the Northwest Territories. The area, of which about 89 p.c. lies south of the isotherm of 60°F. mean July temperature,^{1/} is 251,700 square miles, approximating that of Manitoba and greater by 5,000 square miles than the combined areas of the British Isles and Norway. With the exception of a point of the Precambrian rocks jutting in from the east at the Height of Land well to the north, and again covering a narrow strip along the northern boundary, the whole of the province is overlain by generally fertile soil of great depth. The greater part of the developed area in the south is comprised in the great treeless prairie belt fringed to the north with a zone of poplar, interspersed with open prairie, which gradually changes into the northern mixed forest covering all the northerly parts. Apart from the southern prairies, which are extraordinarily smooth, the surface topography is generally of low relief and with a general rising slope towards the west. The bulk of the province has a general elevation of between 1,000 and 2,000 feet with the maximum elevation of about 4,500 feet on the eastern point of the Cypress hills in the southwest corner. The climate is quite different from that of Eastern Canada with less precipitation and perhaps slightly more severe features than are encountered in many other parts of the country but is, nevertheless, most favourable to plant and animal growth. The northern districts, abundantly watered by lakes and rivers, are rich in timber resources and have prospective mineral wealth. The southern plains include a large portion of the wonderful western wheat fields.

Alberta.— Lying between Saskatchewan on the east and the Rocky mountains and the 120th meridian on the west, and bounded on the north and south by the Northwest Territories and the United States respectively, is the province of Alberta. Its area is slightly greater than that of Saskatchewan or Manitoba, comprising a total of 255,285

^{1/} The isotherm of 60°F. mean July temperature is generally considered as the northern limit for the economic production of cereals.

square miles, of which 90 p.c. lies south of the isotherm of 60°F. mean July temperature. The area of the province is over 8,600 square miles greater than the combined areas of the British Isles and Norway. Like Saskatchewan the southern part of the province is comprised in the dry treeless prairie belt, changing to the north into a zone of poplar interspersed with open prairie, which again gives way to the northern mixed forest covering the northerly parts. The Precambrian rocks just touch Alberta at its northeast corner, so that excepting the fringe of mountainous country on its western border, the whole of the province is overlain by arable soil of great depth. Alberta has two marked features: (1) the great valley of the Peace river, which has already resulted in the extension of settlement farther north than any other part of Canada, and (2) the wonderful grazing lands in the foothills district, which, rising sharply on the west, commences the ascent which continues to the very peaks of the Rocky mountains. The southern half of the province rising towards the west, lies at a general elevation of from 2,000 to 4,000 feet; but in the northern half the slope descends until elevations of well under 1,000 feet are reached at Lake Athabasca in the north east corner. The highest point in the province is Mount Columbia with an elevation of 12,294 feet. The climate of Alberta is a particularly pleasant one, cooler in summer than the more easterly parts of the country and tempered in winter by the Chinook winds. Formerly a great ranching country, Alberta has become an important wheat producing region. Considerable coal and oil mining are carried on, lumbering is important in the more mountainous western parts and in the north while some ranching is still pursued in the less populous sections.

In all three provinces the wide stretches of the north abound in wild life and afford attractive opportunities for hunting and fishing. Numerous lakes and rivers, comprising nearly 31,000 square miles in area, abound in valuable food fishes. Though at present not widely known, the attraction of this region for tourists may be expected to increase in years to come. Enormous water powers, as yet but little developed, form another valuable asset of these provinces. The natural resources of the Prairie Provinces, which have been a troublesome political issue in the west for many years are now under provincial control.*

The total land area of the nine provinces is 1,282,067,000 acres of which the Prairie Provinces comprise 452,159,000 acres. It is estimated that approximately 199,904,000 acres of this are available for use in agricultural production. The occupied farm land, according to the census of 1931 was 109,782,602 acres or 54.9 p.c. of the possible. The amount of arable land in the Prairie Provinces unoccupied is, therefore, approximately 90,121,000 acres. Particulars of the area, agricultural land, forest areas, population etc., are shown in the following table:-

	Manitoba		Saskatchewan		Alberta		Prairie Provinces		Canada †	
	Sq.Mi.	Acres	Sq.Mi.	Acres	Sq.Mi.	Acres	Sq.Mi.	Acres	Sq.Mi.	Acres
1. Total Area	246,512	157,768,000	251,700	161,088,000	255,285	163,382,000	753,497	482,238,000	2,178,105	1,393,987
2. Water Area	26,789	17,145,000	13,725	8,784,000	6,485	4,150,000	46,999	30,079,000	174,875	111,920
3. Land Area	219,723	140,623,000	237,975	152,304,000	248,800	159,232,000	606,498	452,159,000	2,003,230	1,282,067
4. Total Agricultural Land	50,594	32,380,000	125,116	80,074,000	136,641	87,450,000	312,351	199,904,000	550,245	352,157
5. Occupied Farm Land	23,643	15,131,685	86,989	55,673,460	60,902	38,977,457	171,534	109,782,602	254,865	163,114
A. Improved	13,315	8,521,930	52,420	33,548,988	27,732	17,748,518	93,467	59,819,436	133,956	85,732
B. Unimproved	10,328	6,609,755	34,569	22,124,472	33,170	21,228,939	78,067	49,963,166	120,909	77,381
(a) Woodlots	3,154	2,018,520	5,482	3,508,480	6,084	3,893,680	14,720	9,420,680	41,633	26,645
(b) Prairie, natural pasture and waste land	7,174	4,591,235	29,087	18,615,992	27,086	17,335,259	63,347	40,542,486	79,276	50,736
6. Total Forested Land	93,000	59,520,000	82,159	52,582,000	126,769	81,132,000	301,928	193,234,000	1,093,430	699,795
(a) In farm woodlots	3,155	2,019,000	5,481	3,508,000	6,084	3,894,000	14,720	9,421,000	41,633	26,645
(b) Other alienated lands	5,378	3,442,000	861	551,000	3,908	2,501,000	10,147	6,494,000	69,842	44,699
(c) Under timber licence or lease	3,809	2,438,000	719	460,000	970	621,000	5,498	3,519,000	177,856	113,828
(d) Unalienated or unlicensed	84,467	54,059,000	75,817	48,523,000	116,777	74,737,000	277,061	177,319,000	981,955	628,451
Population 1931 (Census)		700,139		921,785		731,605		2,353,529		10,362
Population 1934 (estimated)		731,000		966,000		770,000		2,467,000		10,821

*See Chapter VII. † Nine provinces only.

CHAPTER II.--GROWTH AND DEVELOPMENT OF THE POPULATION OF THE PRAIRIE PROVINCES.

Introductory.-- In the following study of the growth and development of the population of the Prairie Provinces items of information already well known or readily accessible have been omitted. Such questions as racial composition, nationality, language, etc. have been rather thoroughly dealt with in a separate study.^x It was considered desirable, therefore, in the limited space available in this publication to attack the unfamiliar and imperfectly understood question of population movement, spread and density.

Summary of the Growth and Composition of the Population of the Prairie Provinces.-- The growth of population in the Prairie Provinces, since 1901, is illustrated in tables 1 and 2.

TABLE 1.--Population of the Prairie Provinces, 1901-31.

	1901	1906	1911	1916	1921	1926	1931
Prairie Provinces	419,512	808,646	1,328,121	1,698,137	1,956,082	2,067,393	2,353,529
Manitoba	255,211	365,688	461,394	553,860	610,118	639,056	700,139
Saskatchewan	91,279	257,763	492,432	647,835	757,510	820,738	921,785
Alberta	73,022	185,195	374,295	496,442	588,454	607,599	731,605

Per Cent Distribution.

Prairie Provinces	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Manitoba	60.83	45.22	34.74	32.62	31.19	30.91	29.75
Saskatchewan	21.76	31.88	37.08	38.15	38.73	39.70	39.17
Alberta	17.41	22.90	28.18	29.23	30.08	29.39	31.08

TABLE 2.--Population of the Prairie Provinces, 1901-31.
Absolute Increases

	1901-06	1906-11	1911-16	1916-21	1921-26	1926-31
Prairie Provinces	389,134	519,475	370,016	257,945	111,311	286,136
Manitoba	110,477	95,706	92,466	56,258	28,938	61,083
Saskatchewan	166,484	234,669	155,403	109,675	63,228	101,047
Alberta	112,173	189,100	122,147	92,012	19,145	124,006

Per Cent Increase in each Period of Five Years.

Prairie Provinces	92.76	64.24	27.86	15.19	5.69	13.84
Manitoba	43.29	26.17	20.04	10.16	4.74	9.56
Saskatchewan	182.39	91.04	31.56	16.93	8.35	12.31
Alberta	153.62	102.11	32.63	18.53	3.25	20.41

The population of the Prairie Provinces grew from 419,512 in 1901 to 2,353,529 in 1931, an increase of 1,934,017 in 30 years or an average of 64,467 a year. The 1931 population was composed of 1,209,756 persons born in the Prairie Provinces, 282,901 born in other parts of Canada and 860,872 immigrants.

There were 709,494 persons living in cities and towns of 1,000 or more population; 175,888 in towns and villages of less than a thousand, 1,195,414 on farms, and 272,733 in rural areas but not on farms. Of the rural non-farm population 50,000 were in rural municipalities like St. James which are really urban in all respects except organization. Thus the Prairie Provinces in 1931 comprised a farm population of 1,195,414 and a non-farm population of 1,158,115 or 50.8 p.c. farm and 49.2 p.c. urban or semi-urban.

The number of persons born in the Prairie Provinces (1,209,756) deserves a word of comment. In 1901 the Prairie Province born numbered 156,070 so that they have increased since that date by 1,053,680, besides some 100,000 Prairie Province born living in other parts of Canada in 1931. Thus the mean population since 1901, viz. about

^x"Origin, Birthplace, Nationality and Language of the Canadian People", published by the Dominion Bureau of Statistics.

1,192,000 has just doubled itself by natural increase in 30 years. The present (1931) population of two and a quarter million is reproducing itself by only 36,000^x (1931 natural increase). This illustrates the amazing reproductive powers of a transplanted young adult population - about 26 per cent per decade in this instance or a natural increase per year of over 20 per thousand.

In deciding the significance of the foregoing figures in the matter of growth many things have to be taken into consideration. The reproductive powers already mentioned are, without doubt, striking. The source of the population and the area to which it moved must also be considered. If a population had increased six times from its own source in thirty years, this, of course, would be amazing, but the increase in the Prairie Provinces since 1901 came largely from outside; i.e. the source of supply was almost limitless. The area to which this population moved was (counting only surveyed areas and excluding Indian reserves and the areas taken up by cities and towns) some 267,000 square miles. At the present time (1931) this area (rural) has an average of 5.02 persons per square mile or an ordinary size family per 640 acres of land.

From January 1, 1901 to December 31, 1930 1,878,169 immigrant arrivals gave their destination as one or other of the Prairie Provinces (See table 7) these in addition to the persons coming in from the other provinces of Canada. It is calculated that of these immigrant arrivals 1,692,961 were alive in 1931, but only 777,126 were still to be found in the Prairie Provinces.[†] These two facts in juxtaposition - 777,126 immigrant population out of 1,878,169 arrivals in the 30 years, and 1,053,680 Prairie Province born out of a mean population of 1,192,000 - appear highly significant. In spite of the large immigration, the population of the Prairie Provinces is fast becoming indigenous.

Other striking facts are apparent from Table 2. The absolute increases in population have been dwindling very rapidly since 1901. Table 3 shows the increase in the first five year period (1901-06) represented as 100 and the subsequent increases scaled from this base.

TABLE 3.--Increases in the Population of the Prairie Provinces since 1906 in Terms of the Increase of 1901-06.

	1901-06	1906-11	1911-16	1916-21	1921-26	1926-31
Prairie Provinces	100.0	133.5	94.9	66.2	28.6	73.6
Manitoba	100.0	86.6	83.7	50.9	26.2	55.3
Saskatchewan	100.0	141.0	93.4	65.9	38.0	60.7
Alberta	100.0	168.6	108.9	82.1	17.1	110.6

It will be seen that only one province, Alberta, has kept up the absolute increase it had in 1901-06. (No great reliance can be placed upon the revival of 1926-31 from a headlong trend). These figures are highly significant. A country cannot be expected to keep up its per cent increase in population, but it should keep up its absolute increase until it becomes old, and two of these provinces are only 26 years old. What calls for explanation, then, is not the rapid growth of population in the Prairie Provinces but the sudden arrest in their growth.

I.--MANNER OF SETTLEMENT.

The manner of settlement of the Prairie Provinces is probably the most significant factor in this arrest growth. It includes first and foremost the evenness of spread of the population over the country and as between rural and urban. As secondary considerations, because largely included in the first, are the type of people, their methods of farming (not treated here), their rate of movement within the provinces themselves and the direction of their movements as indicated by the movement of centres of population and the proportion of incomers to outgoers - immigration and emigration.

In passing it is almost obvious that the arrest in growth has not been due to death, nor appreciably to the lowering of the birth rates. Although the latter are showing symptoms of decline they are still high as compared with the older provinces. As a matter of interest table 4 which extracts material from Canada's Vital Statistics is attached herewith.

It must be remembered that the present population consists of nearly one-half children. The remaining 83,746 immigrants living in the Prairie Provinces in 1931, (with the exception of 2,187 arriving in the first five months of 1931) were all survivors of the pre-1901 immigrants.

TABLE 4.--Births, Deaths and Marriages in the Prairie Provinces from 1921 to 1931
with Comparative Rates for 1921 and 1931.

Year	Births				Deaths				Marriages			
	Prairie Provinces	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Manitoba	Saskatchewan	Alberta
1921	57,532	18,478	22,493	16,561	15,924	5,388	5,596	4,940	15,072	5,310	5,101	4,661
1922	56,181	17,679	22,339	16,163	17,137	5,754	6,119	5,264	14,141	4,808	5,061	4,277
1923	52,479	16,472	20,947	15,060	16,518	5,330	6,182	5,006	13,706	4,544	5,045	4,117
1924	51,590	15,454	21,539	14,597	15,653	5,023	5,772	4,858	13,083	4,132	4,792	4,155
1925	50,373	14,867	20,582	14,924	15,570	5,245	5,628	4,697	13,641	4,377	4,909	4,355
1926	49,833	14,661	20,716	14,456	16,554	5,335	6,060	5,159	14,523	4,537	5,483	4,503
1927	50,059	14,147	21,015	14,897	16,399	5,309	6,031	5,059	15,156	4,716	5,733	4,707
1928	51,457	14,504	21,261	15,692	17,261	5,396	6,166	5,699	17,647	5,170	6,701	5,776
1929	52,606	14,236	21,446	16,924	18,762	5,808	6,715	6,239	17,821	5,269	6,548	6,004
1930	54,111	14,411	22,051	17,649	17,490	5,685	6,309	5,496	16,112	5,061	5,717	5,334
1931	52,959	14,376	21,331	17,252	16,687	5,319	6,066	5,302	15,730	4,888	5,700	5,142

TABLE 4(a).--Rates per 1,000

	Births	Deaths	Marriages		Births	Deaths	Marriages
<u>1921</u>				<u>1931</u>			
Prairie Provinces	29.4	8.1	7.7	Prairie Provinces	22.5	7.1	6.7
Manitoba	30.3	8.8	8.7	Manitoba	20.5	7.6	7.0
Saskatchewan	29.7	7.4	6.7	Saskatchewan	23.1	6.6	6.2
Alberta	28.2	8.4	7.9	Alberta	23.6	7.2	7.0
Canada (excluding Quebec)	26.3	10.5	7.9	Canada (excluding Quebec)	20.9	9.3	6.6
				Canada (total)	23.2	10.1	6.4

The above table, it will be noticed, shows the supply of natural increase. It has already been pointed out that the Prairie Province-born population increased by 1,053,680 in the thirty years, or an average of 35,123 a year. In 1931 the natural increase was 36,272 while in 1921 it was 41,608. Now it is clear that although the natural increase is apparently diminishing it is still high enough to give the population a yearly increment of more than it had on the average in the thirty years, from its own sources. Further the total natural increase from June 1921 to June 1931 was as follows:

7/12 of 1921 = 24,269	1927 = 33,660
1922 = 39,044	1928 = 34,196
1923 = 35,961	1929 = 33,844
1924 = 35,937	1930 = 36,621
1925 = 34,803	5/12 of 1931 = 15,115
1926 = 33,279	Total in ten years <u>356,729</u>

The total increase in the population in the ten years was 397,447 and this (with the exception of 40,718) could have been supplied by its own natural increase in the interval. And yet 516,054 immigrants entered the Prairie Provinces in the interval, of whom 245,131 remained till 1931.

The Evenness of Spread of the Population.-- Evenness or unevenness of spread is capable of definite measurement since we have records of the population by areas as small as townships (36 square miles). In the Prairie Provinces there are 7,425 such townships, excluding unsurveyed areas, water areas, Indian Reserves, etc. Since about 1,361,628 (rural) out of the population (1931) were in these surveyed areas, a perfectly even spread would mean 183 persons in each township. The following table shows the townships according to the number of persons per township arranged in classes from the most sparsely to the most thickly settled.

TABLE 5.—Population of 7,425 Townships in the Prairie Provinces, 1931, Arranged in Intervals from the Most Sparsely to the Most Thickly Settled; also Urban Population by Size.

Population of Surveyed Townships	Number of Townships				Population of Surveyed Townships	Number of Townships			
	Prairie Provinces	Manitoba	Saskat- chewan	Alberta		Prairie Provinces	Manitoba	Saskat- chewan	Alberta
Number of townships	7,425	1,234	3,265	2,926	792 to less than 828	5	4	-	1
No population	173	42	31	100	828 " " "	5	3	-	2
Less than 36	1,047	152	246	649	864 " " "	3	3	-	-
36 to less than 72	608	96	182	330	900 " " "	9	5	-	4
72 " " "	108	595	79	241	936 " " "	2	1	1	-
108 " " "	144	714	72	337	972 " " "	1	1	-	-
144 " " "	180	382	81	512	1008 " " "	1	1	-	-
180 " " "	216	919	91	563	1044 " " "	1	-	-	1
216 " " "	252	736	116	416	1080 " " "	1116	2	2	-
252 " " "	288	509	114	261	1116 " " "	1152	3	1	1
288 " " "	324	323	78	161	1152 " " "	1188	1	-	1
324 " " "	360	241	60	110	1296 " " "	1332	1	1	-
360 " " "	396	180	46	74	1332 " " "	1368	1	-	1
396 " " "	432	115	27	55	1404 " " "	1440	2	1	1
432 " " "	468	75	23	22	1440 " " "	1476	1	1	-
468 " " "	504	67	22	19	1512 " " "	1548	1	1	-
504 " " "	540	54	32	9	1548 " " "	1584	1	1	-
540 " " "	576	44	18	8	1872 " " "	1908	1	-	1
576 " " "	612	20	6	6	1944 " " "	1980	1	-	1
612 " " "	648	30	21	1	2700 " " "	2736	1	-	1
648 " " "	684	17	11	1	2952 " " "	2988	1	-	1
684 " " "	720	15	9	4	Mean density				
720 " " "	756	10	8	1	Persons per sq. mi.	5.02	6.75	5.28	4.20
756 " " "	792	7	4	2	Standard deviation (spread)	4.20	5.90	3.96	4.58
					P.C. spread	83.6	87.4	75.0	109.0

Urban Centres by Size of Population

Population	Number of Urban Centres and Suburban Municipalities				Population	Number of Urban Centres and Suburban Municipalities			
	Prairie Provinces	Manitoba	Saskat- chewan	Alberta		Prairie Provinces	Manitoba	Saskat- chewan	Alberta
Total	749	77	466	206	1,000	61	18	20	23
10,000 and over	12	5	3	4	900	9	5	1	3
9,000	2	1	1	-	800	17	5	6	6
8,000	-	-	-	-	700	11	5	2	4
7,000	-	-	-	-	600	18	9	4	5
6,000	2	2	-	-	500	42	4	27	11
5,000	5	1	4	-	400	42	7	27	8
4,000	1	1	-	-	300	77	6	46	25
3,000	4	3	1	-	200	140	2	102	36
2,000	9	2	3	4	100	232	1	170	61
					Less than 100	65	-	49	16

Population of Indian Reserves Unorganized parts, etc.					Total Population				
	Prairie Provinces	Manitoba	Saskat- chewan	Alberta		Prairie Provinces	Manitoba	Saskat- chewan	Alberta
Total	50,202	20,495	14,069	15,638	Total	2,353,529	700,139	921,785	731,405
Indian Reserves	34,982	12,534	11,848	10,600	Rural	1,468,147	384,170	630,880	453,097
Unorganized	11,471	7,961	2,221	1,289	Urban	885,382	315,969	290,905	278,508
Park areas	3,749	-	-	3,749					

The average density of the three provinces (rural population, surveyed areas) is shown to be 5.02; that of Manitoba 6.75; of Saskatchewan 5.28 and Alberta 4.20. The population of Saskatchewan is spread quite evenly, although, of course, thinly; that of Alberta very unevenly while that of Manitoba holds an intermediate position between the two. An interesting comparison is afforded by the inclusion of urban areas by size of population. It will be noticed that there are 65 villages with less than 100 persons and 232 with more than 100 but less than 200 - say an average of 150. There is not much difference between these villages and the townships (4 in number) that have more than 50 to the square mile. (The "rural municipalities" are included with the urban). There is really a connecting link between the rural density and the urbanization. The fact that there are 749 urban centres to 7,425 rural townships, or about one in ten; i.e. an urban unit on an average to 360 square miles of rural settlement, is readily understood, while the thinness of the rural population and the large area of the country readily explain the small size of the urban units. The connection between urbanization and area as well as density will be treated more fully later.

As further elaborating table 5, table 6, which shows the absolute areas and calculated population by units of density is added.

TABLE 6.—Areas and Population of the Prairie Provinces Arranged According to Relative Density in 1931.

Population	Area in Square Miles				Population			
	Prairie Provinces	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Manitoba	Saskatchewan	Alberta
No. population	6,228	1,512	1,116	3,600	-	-	-	-
.5 per sq. mi.	37,692	5,472	8,856	23,364	18,846	2,736	4,428	11,682
1.5	21,888	3,456	6,552	11,880	32,832	5,184	9,828	17,820
2.5	21,420	2,844	8,676	9,900	53,550	7,110	21,690	24,750
3.5	25,704	2,592	12,132	10,980	89,964	9,072	42,462	38,430
4.5	31,752	2,916	18,432	10,404	142,884	13,122	82,944	46,818
5.5	33,084	3,276	20,268	9,540	181,962	18,018	111,474	52,470
6.5	26,496	4,176	14,976	7,344	172,224	27,144	97,344	47,736
7.5	18,324	4,104	9,396	4,824	137,430	30,780	70,470	36,180
8.5	11,628	2,808	5,796	3,024	98,838	23,868	49,266	25,704
9.5	8,676	2,160	3,960	2,556	82,422	20,520	37,620	24,282
10.5	6,480	1,656	2,664	2,160	68,040	17,388	27,972	22,680
11.5	4,140	972	1,980	1,188	47,610	11,178	22,770	13,662
12.5	2,700	828	792	1,080	33,750	10,350	9,900	13,500
13.5	2,412	792	684	936	32,562	10,692	9,234	12,636
14.5	1,944	1,152	324	468	28,188	16,704	4,698	6,786
15.5	1,584	648	288	648	24,552	10,044	4,464	10,044
16.5	720	216	216	288	11,880	3,564	3,564	4,752
17.5	1,080	756	36	288	18,900	13,230	630	5,040
18.5	612	396	36	180	11,322	7,326	666	3,330
19.5	540	324	144	72	10,530	6,318	2,808	1,404
20.5	360	288	36	36	7,380	5,904	738	738
21.5	252	144	72	36	5,418	3,096	1,548	774
22.5	180	144	-	36	4,050	3,240	-	810
23.5	180	108	-	72	4,230	2,538	-	1,692
24.5	108	108	-	-	2,646	2,646	-	-
25.5	324	180	-	144	8,262	4,590	-	3,672
26.5	72	36	36	-	1,908	954	954	-
27.5	36	36	-	-	990	990	-	-
28.5	36	36	-	-	1,026	1,026	-	-
29.5	36	-	-	36	1,062	-	-	1,062
30.5	72	72	-	-	2,196	2,196	-	-
31.5	108	36	36	36	3,402	1,134	1,134	1,134
32.5	36	-	36	-	1,170	-	1,170	-
33.5	36	36	-	-	1,314	1,314	-	-
34.5	36	-	-	36	1,350	-	-	1,350
35.5	72	36	-	36	2,844	1,422	-	1,422
36.5	36	36	-	-	1,458	1,458	-	-
37.5	36	36	-	-	1,530	1,530	-	-
38.5	36	36	-	-	1,566	1,566	-	-
39.5	36	-	-	36	1,890	-	-	1,890
40.5	36	-	-	36	1,962	-	-	1,962
41.5	36	-	-	36	2,718	-	-	2,718
42.5	36	-	-	36	2,970	-	-	2,970
TOTAL	257,500	44,424	117,540	105,336	1,361,628	299,952	619,776	441,900

It will be seen that the most common density is $5\frac{1}{2}$ persons to the square mile (taking 33,084 square miles with 181,962 population or nearly one-seventh of the whole). The thinness of the population of Alberta is illustrated by the fact that half the area has less than 4 to the square mile but that this area has less than a fourth of the population; i.e. more than $\frac{2}{3}$ of the rural population is found in less than half of the surveyed area. In addition to the unorganized territory there are thirty thousand square miles with less than one person to the square mile. Alberta may be considered a new country, while Saskatchewan, with the exception of its unorganized territory, is either comparatively settled or settling more intensively. An examination of the movement of the population will help further to interpret this table.

The Movement of Population.— The movement of population as between the Prairie Provinces and other parts of the world is measured by the figures of immigration and emigration. It is true that we have no definite measurement of the latter but by the following method can arrive at a fairly close estimate. We know the number of immigrants by year of arrival, and, since the death rate is not subject to violent fluctuations, can estimate to a reasonable degree of accuracy the number who have died. On the other hand we have a record of the number of immigrant arrivals giving the Prairie Provinces as their destination, for every year back to 1901. Considerable adjustment is necessary, however, as the Department of Immigration's figures of arrivals are for fiscal years (ending March 31) and the Census record of year of arrival is for calendar years. Table 7 shows (1) the number of immigrant arrivals in each of the Prairie Provinces since 1901; (2) the number of these expected to survive till 1931 and (3) the number actually surviving till 1931. The difference is assumed to be emigration from the Prairie Provinces.

TABLE 7.—Immigration into and Emigration from the Prairie Provinces since 1901.*

	Prairie Provinces	Manitoba	Saskatchewan	Alberta
Immigrant Population 1901	140,139	73,718	36,221	30,300
Expected Survivors in 1931	80,861	37,050	23,855	19,956
Actual Survivors in 1931	78,838	31,200	26,239	21,399
Estimated Emigration	2,023	5,850	- 2,384 ^{1/}	- 1,443 ^{1/}
Arrivals 1901-1910	709,253	337,280	177,921	194,052
Expected Survivors in 1931	586,837	273,821	149,721	163,295
Actual Survivors in 1931	283,060	74,749	112,637	95,674
Estimated Emigration	303,777	199,072	37,084	67,621
Arrivals 1911-1920	652,862	190,412	216,478	245,972
Expected Survivors in 1931	598,482	174,551	198,445	225,486
Actual Survivors in 1931	248,935	65,717	92,883	90,335
Estimated Emigration	349,547	108,834	105,562	135,151
Arrivals 1921-1931	516,054	263,195	127,167	125,692
Expected Survivors in 1931	507,642	258,905	125,094	123,643
Actual Survivors in 1931	245,131	63,634	84,476	97,021
Estimated Emigration	262,511	195,271	40,618	26,622
Total Arrivals 1901-1930	1,878,169	790,887	521,566	565,716
Expected Survivors in 1931	1,692,961	707,277	473,260	512,424
Actual Survivors in 1931	777,126	204,100	289,996	283,030
Total Emigration of 1901-1930 Arrivals	915,835	503,177	183,264	229,394
Total Emigration of the Immigrant Population of 1901	2,026	5,850	- 2,381 ^{1/}	- 1,443 ^{1/}
Total Emigration Since 1901	917,861	509,027	180,883	227,951
Immigrant Population in 1931	860,872	236,589	318,545	305,738

Summary for Prairie Provinces

1901 Immigrant population plus arrivals up to January 1931 ..	2,018,308	Estimated deaths in period ...	241,762
Arrivals first 5 months of 1931 (Surviving)	2,187	Estimated Emigration	917,861
Total Incomers	2,020,495	Lying in Prairie Provinces in 1931	860,872
			<u>2,020,495</u>

For footnotes to this table see page following.

Movement of Population between the Prairie Provinces and the rest of Canada.- It is not so easy to trace the movements as between the Prairies and the rest of Canada. The 1931 Census records 282,901 persons living in the Prairie Provinces who were born in other parts of Canada. By calculating the death rates from Census to Census the number expected to be alive at the next Census can be estimated. The difference is represented by the movement in or out. Table 8 shows (1) the number of persons living in each of the Prairie Provinces in the Census years 1901, 1911, 1921, 1926 and 1931. (2) The ages of these in 1926 and 1931 from which death rates can be calculated; (3) the number of these expected to survive to the next Census; (4) the difference between the two as incomers or outgoers and the total movement in and out between 1901 and 1931.

1/ The minus sign is intelligible on the assumption that some of those leaving Manitoba went to live in Saskatchewan and Alberta; also that immigrants living in other parts of Canada in 1901 moved to these two provinces.

NOTE:- The Survivors of the immigrant arrivals were calculated (1) on the basis of the age distribution of immigrants at the time of their arrival; (2) on the length of time in Canada of the immigrant population in 1931 reported as arriving at different years. (3) on the specific death rates of the quinquennial age groups in the 1931 male life table.

Thus the following calculations were made:

1. The immigrant population of the Prairies in 1901 and the subsequent arrivals were calculated as having lived in Canada by 1931 as follows:

	<u>Manitoba</u>	<u>Saskatchewan and Alberta</u>
1901 Immigrant population	46.6 years	38.8 years
Arrivals 1901-10	26.0 "	26.0 "
1911-20	17.0 "	17.0 "
1921-30	4.0 "	5.0 "

The expected survivors calculated on the basis of this length of time in Canada were:

	<u>Manitoba</u>	<u>Saskatchewan</u>	<u>Alberta</u>
1901 Immigrant Population	50,262	65,860	65,860
Arrivals 1901-10	84,152	84,152	84,152
1911-20	91,670	91,670	91,670
1921-30	98,373	98,014	98,014

The death rate of immigrants at the time of arrival, based upon their age distribution is calculated at 4.534 per thousand. This is much lower than the general death rate, but is readily understandable from the fact that about 68 p.c. of the immigrants arrive at ages 15 to 34 when the death rate is at its lowest. The expected death rates of the immigrant population are (calculated) as follows:

At arrival	4.534 per cent
in 4 years	1.6270 " "
5 "	1.9860 " "
17 "	8.3300 " "
26 "	15.8480 " "
39 "	34.1400 " "
47 "	49.7380 " "

TABLE 8.—Ages of Persons Living in the Prairie Provinces in 1926, who were Born in Other Parts of Canada.

Ages	Residence in 1926				Estimated Survivors in 1931			
	Prairie Provinces	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Manitoba	Saskatchewan	Alberta
0 - 9	8,062	2,033	2,962	3,067	7,957	2,007	2,923	3,027
10 - 14	9,883	2,154	3,904	3,825	9,795	2,135	3,869	3,791
15 - 19	16,334	2,902	7,437	5,995	16,105	2,861	7,333	5,911
20 - 24	21,628	3,717	10,517	7,394	21,283	3,658	10,349	7,276
25 - 29	24,341	4,728	11,685	7,928	23,927	4,648	11,486	7,793
30 - 34	27,617	5,805	12,990	8,822	27,092	5,695	12,743	8,654
35 - 39	34,937	7,893	15,825	11,219	34,133	7,711	15,461	10,961
40 - 44	34,685	8,555	15,312	10,818	33,610	8,290	14,837	10,483
45 - 49	32,230	9,402	13,242	9,586	30,876	9,007	12,686	9,183
50 - 54	25,173	8,362	9,656	7,160	23,718	7,877	9,096	6,745
55 - 59	17,986	6,516	6,398	5,072	16,421	5,949	5,841	4,631
60 - 64	14,691	5,583	5,146	3,962	12,752	4,846	4,467	3,439
65 - 69	10,795	4,213	3,682	2,900	8,701	3,396	2,968	2,337
70 - 74	6,628	2,606	2,297	1,725	4,799	1,887	1,663	1,249
75 - 79	3,430	1,439	1,107	884	2,021	848	652	521
80 - 84	1,441	649	462	330	607	273	195	139
85 - 89	464	189	144	131	133	54	41	38
90 +	126	46	46	34	24	9	9	6
Not Stated	84	12	40	32				
TOTAL	290,540	76,804	122,852	90,884	273,954	71,151	116,619	86,184

Ages of Persons Living in the Prairie Provinces in 1931, who were Born in Other Parts of Canada.

Ages	Residence in 1931				Estimated Movement in or out between Census and 1931			
	Prairie Provinces	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Manitoba	Saskatchewan	Alberta
0 - 4	3,050	836	889	1,325	304	173	- 378	509
5 - 9	5,211	1,344	1,656	2,211	4,173	1,001	1,051	2,121
10 - 14	6,919	1,664	2,318	2,937	1,703	334	425	944
15 - 19	11,498	2,469	4,294	4,735	1,997	515	345	1,137
20 - 24	18,102	3,376	7,678	7,048	- 496	100	- 1,030	434
25 - 29	20,787	3,758	9,319	7,710	- 478	- 43	- 967	532
30 - 34	23,449	4,605	10,519	8,325	506	72	- 210	644
35 - 39	27,598	5,767	12,533	9,298	- 1,567	- 316	- 1,081	- 170
40 - 44	32,566	7,395	14,380	10,791	- 590	- 136	- 662	203
45 - 49	33,020	8,154	14,175	10,691	98	- 1	- 330	429
50 - 54	30,974	9,006	12,356	9,612	- 1,403	- 428	- 667	- 308
55 - 59	22,315	7,449	8,429	6,437	491	166	83	242
60 - 64	16,912	6,115	5,924	4,873	70	85	- 114	99
65 - 69	12,822	4,931	4,353	3,538	804	409	255	140
70 - 74	9,505	3,705	3,223	2,577	147	44	51	52
75 - 79	4,946	1,931	1,714	1,301	128	28	45	55
80 - 84	2,149	876	697	576	173	65	49	59
85 - 89	780	338	244	198	- 8	- 2	- 4	- 2
90 - 94	125	52	37	36	3	1	1	1
95 - 99	27	10	10	7				
100 +	4	3	-	1				
Not Specified	142	28	71	43				
1931	282,901	73,812	114,819	94,270				
1926	*290,140	76,804	122,852	90,884	6,055	2,067	- 3,138	7,126
1921	327,109	87,090	135,736	104,283	-11,496	-4,568	- 7,343	415
1911	297,452	91,989	124,312	81,151	44,941	223	15,369	29,349
1901	114,271	79,000	19,685	15,586	202,911	18,512	101,039	83,360

*Exclusive of Indians.

The following estimates of population movements are based on the foregoing table. While some of them must be regarded as net rather than total movements, they, nevertheless, furnish a conception of considerable value.

1. In 1901 there were 114,271 persons living in the Prairie Provinces who had come from other provinces in Canada and in 1911, 297,452. If we estimate that 10 p.c. of the above 114,271 persons or 11,427 died before 1911 the net movement into these provinces between 1901 and 1911 was 183,181. Similarly between 1911 and 1921 there was a net in-movement of 59,402; between 1921 and 1926 a net loss of 20,617 and between 1926 and 1931 a net in-movement of 6,507. The net in-movement between 1901 and 1931 was 249,090. Now we do not know how long the 114,271 living in the Prairie Provinces in 1901 had been living there and can not tell definitely how many of those who had moved in had died by that time, but since these provinces had then been very recently settled we are not far wrong in assuming that this 1901 ex-province population had been living there not more than ten years on the average and that the deaths between the time of their moving in and 1901 were not more than 15,600. Thus to obtain the total movement from other provinces in Canada up to 1931 we add 156,900 to the 249,090 and obtain 402,990 - say 403,000, an addition to those moving in and out again from Census to Census. Of these, 79,990 of the pre-1901 and 202,911 of the post-1901 are living in the Prairie Provinces today (1931) while 102,538 have died; at least 14,413 went back to other provinces between 1921 and 1926 and 3,138 between 1926 and 1931 or a minimum backward trek of 17,551.

The opposite movement must now be considered. The 17,551 who went back to the other provinces of the Dominion took back with them their children. In 1921 there were 45,375 persons born in the Prairie Provinces and living in other parts of the Dominion. Allowing a low death rate for these (mostly young persons, see table 9) it is estimated that about 3,500 of them died between 1921 and 1931 leaving 41,875 survivors whom we might expect to find living in other parts of Canada in 1931. As a matter of fact there were 92,625 such persons which must mean that 50,750 Prairie Province born went to live in other parts of Canada between 1921 and 1931. It would appear that most of these went out between 1921 and 1926.

TABLE 9.--Ages of the Population Born in each of the Prairie Provinces but Living in Another Province of Canada, 1931.

Age	Birthplace				Age	Birthplace			
	Prairie Provinces	Manitoba	Saskatchewan	Alberta		Prairie Provinces	Manitoba	Saskatchewan	Alberta
All ages	186,097	89,714	59,909	36,474	50 - 54	1,797	1,598	129	70
0 - 4	9,499	3,106	3,970	2,423	55 - 59	708	603	62	43
5 - 9	21,324	6,938	8,732	5,654	60 - 64	381	304	47	30
10 - 14	30,926	9,481	13,056	8,389	65 - 69	315	258	35	22
15 - 19	36,456	12,750	14,302	9,404	70 - 74	293	250	22	21
20 - 24	29,588	14,471	9,845	5,272	75 - 79	137	109	15	13
25 - 29	19,237	12,259	4,537	2,441	80 - 84	70	61	9	-
30 - 34	12,338	9,116	2,014	1,208	85 - 89	31	24	4	3
35 - 39	10,393	7,980	1,582	831	90 - 94	15	15	-	-
40 - 44	7,585	6,066	1,057	462	95 - 99	2	2	-	-
45 - 49	4,964	4,305	476	183	100 +	1	1	-	-
					Not Stated	37	17	15	5

Now table 9 shows that of those born in one of the Prairie Provinces and living in another province in 1931 ("other provinces" in this case includes the other Prairie Provinces) 17 p.c. were under 10 years of age, so that they must have left after 1921, while 53 per cent were under 20 years of age; i.e. must have been under 10 in 1921 and therefore not likely to move without their parents. It is likely then, that at least half and probably many more, of the 50,750 Prairie Province born who went to live in other provinces in 1921-31 were children of relatives of the 17,551 persons who had come from other provinces and went back from the Prairie Provinces in the same period. In fact it is reasonable to assume that about 50,000 were children of persons born in these other provinces. We can thus sum up by saying that 403,000 persons moved into the prairies from other provinces and that about 18,000 went back in 1921-31 taking with them 50,000 children born to them in the Prairie Provinces. The consideration of such figures leads to a conception of what emigration really means. If the emigrants to other provinces carried with them so many of the province born, the same must be happening in the case of immigrants who return to their own countries - they must be carrying back with them their Canadian-born children. Consequently to the calculations on immigrant retrograde movement we should add a large number (unknown, of course), of Canadian-born children being carried back to all countries of the world.

Movement of Population Within the Prairie Provinces.— The movement in the provinces themselves is fully as significant as the movement in and out. The movement of the centres of population (See table 10) is an index although such movement is caused, too, by the settlement of new areas by persons from without.

TABLE 10.—Movement of Centres of Population, 1901-31.

	Manitoba		Saskatchewan		Alberta	
	North	West	North	West	North	West
	Miles	Miles	Miles	Miles	Miles	Miles
1901-10	2	- 12	- 9	52	- 16	4
1911-20	4	- 17	5	12	15	- 5
1921-30	- 1	- 4	7	- 4	15	- 1
1901-31	5	- 33	3	60	14	- 2

The minus signs, of course, indicate movement in the opposite direction from that named. The increasing movement north and the easterly rather than westerly movements are interesting to note.

The best indication of movement, however, is that furnished by the attached map showing the increase or decrease in areas between 1921 and 1931. The legend of the map and the tabular matter should make it self-explanatory.

The facts shown in this map should now be compared with the density figures of tables 5 and 6. It is quite clear that the sparsity of population is not caused solely by newness, but partly by outward movement. The map should also help to explain the table on centres of population. Between 1921 and 1931 the population clearly tended to move from the older settled areas to new areas— a net movement from the central parts north, although there was also some movement south.

In addition to the losses shown in the map in the decreasing areas, there were further losses, viz. the loss of natural increase. These losses can be calculated by taking the rates of natural increase to be the same as those of the province. This is, of course, not strictly accurate, but it gives some idea of the total losses or outward movement from these areas and the inward movement over and above natural increase into the increasing areas. The total outward movement, including the loss of natural increase, from the decreasing areas is thus estimated at 128,000, while the inward movement into the increasing areas (over and above natural increase) is estimated at 106,707. We have already calculated the total number of persons coming into the provinces and those leaving the provinces in the period. These facts can now be arranged as follows:

TABLE 11.—Movements of Population, 1921-31.

Net Movements	Prairie Provinces	Manitoba	Saskatchewan	Alberta
1. No. of persons coming in from outside				
Canada 1921-1931	507,642	258,905	125,094	123,643
2. Natural Increase, 1921-1931	356,729	98,953	153,132	104,644
3. Total Incoming, 1921-1931	864,371	357,858	278,226	228,287
4. Total Increase, 1921-1931	397,447	90,021	164,275	143,151
5. Emigration	466,924	267,837	113,951	85,136
6. No. of arrivals 1921-1931 still in Canada .	234,143	60,536	80,540	93,067
7. Emigration of 1921-1931 arrivals	273,499	198,369	44,554	30,576
8. Emigration of 1921 population or natural increase	193,425	69,468	69,397	54,560

(1) Rural Population Increase over 1921

Total	1,354,653	184,481
Manitoba	300,383	8,042
Saskatchewan	616,811	90,134
Alberta	437,459	86,305

Areas of Increasing Population

Areas of Decreasing Population

	Population 1931	Net Increase		Population 1931	Net Increase		Population 1931	Net Decrease		Population 1931	Net Decrease
1.	4,011	836	Man. N. of	7,508	4,923	19.	9,000	686	37.	1,989	165
2.	10,433	1,218	Sask. N. of	1,025	585	20.	19,915	1,909	38.	15,312	1,266
3.	48,713	5,205	Alta. N.W. of	3,318	1,693	21.	3,298	254	39.	2,832	178
4.	63,680	12,886				22.	9,178	597	40.	355	109
5.	2,483	225				23.	32,024	4,457	41.	1,395	114
6.	4,713	1,108				24.	21,932	6,968	42.	804	131
7.	142,736	41,745				25.	18,938	4,171	43.	15,408	2,779
8.	127,809	19,507				26.	21,677	1,833	44.	2,549	227
9.	57,122	12,646				27.	4,625	212	45.	17,650	1,531
10.	18,817	4,475				28.	7,922	266	46.	38,270	16,405
11.	51,220	9,383				29.	872	180	47.	13,980	2,978
12.	103,933	29,894				30.	1,647	106	48.	15,214	652
13.	193,672	53,688				31.	1,866	245	49.	443	336
14.	6,662	466	(1) Exclusive of Rural			32.	5,657	511	50.	10,721	337
15.	4,277	1,461	Municipalities, Indian			33.	2,573	156	51.	129	109
16.	25,874	8,792	Reserves and Park Areas.			34.	4,565	439	52.	204	689
17.	62,068	14,469				35.	64,602	9,601	53.	1,064	204
18.	35,346	20,474				36.	10,323	306	54.	300	91

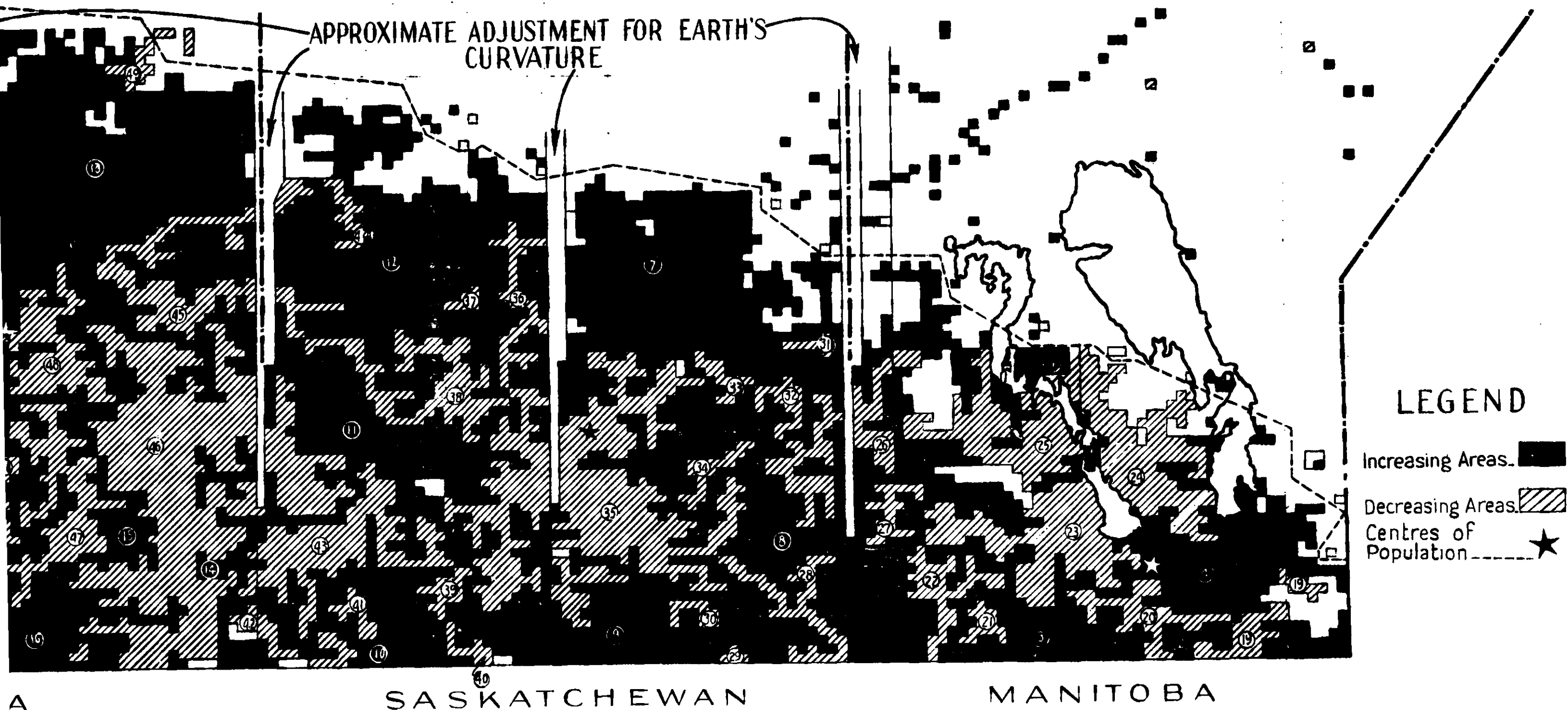


TABLE 11 - Cont'd.--Gross Movements of Population as Indicated by Increasing or Decreasing Areas^{1/}.

	Prairie Provinces 1921-31
1. Losses in decreasing rural areas from 1921-31	61,198
2. Losses and loss of natural increase in decreasing rural areas (No. moving away)	128,000
3. Gains in increasing rural areas	245,679
4. Gains in increasing rural areas not including natural increase	106,707
5. Gains in rural municipalities, Indian Reserves, etc.	31,062
6. Gains in rural municipalities, Indian Reserves, etc., not including natural increase	15,094
7. Gains in urban units	181,904
8. Gains in urban units, not including natural increase	52,412

The Movement as between Rural and Urban.— At first sight it seems absurd to raise the question as to whether there is any danger of the prairies being over-urbanized. It would seem, however, that the usual concept of "urbanization" is not altogether correct. The percentage urban of a population means very little. If, for instance, one country has 300 persons to the square mile and is 60 p.c. urban while another has 10 persons to the square mile and is also 60 p.c. urban the former is rather under-urbanized and the latter greatly over-urbanized. Urbanization should, undoubtedly, bear some relation to the area and density of the country and hence it is important to know the degree of urbanization the Prairie Provinces have reached. While intensive study of this factor would require a very long paper an attempt will be made to deal with it briefly.

In the first place a study was made of certain countries of Europe and the most thickly settled divisions of the United States in order to ascertain the relationship between areas and densities and the degree of urbanization. The important fact in this connection is the urbanization that has been brought about by organization. It does not matter so much whether a city is of a certain size as whether it has been organized as a city. The tiny villages of the Prairie Provinces in this sense are just as much urban as the cities because they have been urbanized by organization. Comparable data on urbanization are difficult to obtain since practice differs widely in different countries. Since it was found impossible to obtain uniformity in this matter it was decided to take the per cent urban as based on organized urban units with 2,000 or more population. This was related to the areas and densities of the countries. The figures of area and density shown in table 12 are those quoted in the official statistics of the countries named inland water being included for the sake of uniformity. While some inaccuracies could not be avoided the figures are sufficiently comparable for the present purpose. (The densities of the Prairie Provinces as described in tables 5 and 6 above are strictly accurate due, of course, to the excellent system of land survey in these provinces).

1/ The rate of natural increase used in the above table was based on the following:

Average population 1921, 1926 and 1931	=	2,125,668
Total natural increase (1921-31)	=	356,729
P.C. natural increase	=	16.3

This rate was applied to the average of the 1921 and 1931 population for different areas.

^x The percentages of urbanization shown in table 12 must not be regarded as comparable to the percentages shown elsewhere for the Prairie Provinces.

TABLE 12.--The Urban Population Compared with the Area and Densities of Certain Countries.

	*Per Cent Urban	Area "000" sq. miles	Density (Per sq. mile)
East Germany (1925)	61	64	243
N. & N.W. Germany (1925)	61	32	255
Rhineland (1925)	72	19	662
Hesse (1925)	58	10	389
Middle Germany (1925)	67	22	471
S. Germany (1925)	52	45	277
Denmark (1921)	43	17	180
Finland (1920)	23	155	22
England & Wales (1911)	80	59	610
N. Ireland (1926)	50	6	240
Free State (1924)	39	27	115
Greece (1921)	36	59	96
Italy (1921)	89	134	313
Norway (1920)	30	128	21
Netherlands (1920)	46	14	500
Poland (1921)	26	155	175
Roumania (1920)	19	118	138
Jugoslavia (1921)	16	100	121
Sweden (1920)	36	179	33
Switzerland (1920)	60	16	235
Ukraine (1926)	19	180	161
White Russia (1926)	17	50	98
Trans-Caucasia (1926)	24	74	79
Uzbek (1926)	12	196	5
Japan (1930)	94	143	700
France (1901)	41	215	183
New England (1930)	77	62	132
Mid. At. States (1930)	78	100	263
E.N. Central States (1930)	66	246	103
S. Atlantic States (1930)	36	269	59
Average	48	96	229

Measurements made in the case of table 12 showed a decided correlation between the per cent urban and the area and density, i.e. the degree of urbanization depends partly upon the density of the population and partly upon the area (and, of course, partly upon other things). This is quite reasonable. A thinly scattered population needs urban units at reasonable distances. The small village in the Prairie Provinces was a matter of absolute necessity. The pioneers of these provinces were helpless in the matter of marketing grain until the railroad came along and with it the small village or town within reach of their land. Thus, the number of these urban units depended of necessity upon the size of the country settled, apart from the question of density. The size of these urban units, of course, was a different thing. It is interesting to observe that the same relationship to the area of the country is also shown in the European countries. In fact a separate measurement made for the Prairie Provinces on the basis of tables 5 and 6 shows that the ratio of the influence of area to that of density is practically the same as in the countries of Europe. This clears up a great deal of confusion of thought on the matter of urbanization. According to current opinion urbanization is a matter of practice - a person leaves the farm and moves into the city changing his occupation owing to taste or necessity as the case may be, chiefly the former. No doubt this is partly true but as the above findings show, it is far from the whole truth. In the first place urbanization was for the Prairie Provinces a necessity; in the second place not the same type of persons was transplanted into the urban and rural units, respectively, of the Prairie Provinces. The attraction of the urban for the rural is only a part of the process and in the prairies this attraction on a large scale is only recent, and because recent and under peculiar conditions it does not need to be accepted as permanent or necessary.

*As far as possible "per cent urban" refers to organized urban units with 2,000 or more population.

The movement from rural to urban in the Prairie Provinces in recent years is shown below. Table 13 shows the comparative percentages (1) rural, (2) urban less than a thousand and (3) urban over 1,000 in the Prairie Provinces by Census divisions 1921 and 1931. Table 14 shows for 1931 by Census divisions the population distributed as (1) rural non-farm, (2) urban under 1,000 and (3) urban over 1,000.

TABLE 13.—Prairie Provinces by Census Divisions 1931: Per Cent Population, Rural Non-farm, Urban less than 1,000 and Urban 1,000 and over.

		Per Cent of Total Population			Area	Density
		Rural Non-Farm	Urban under 1,000	Urban 1,000 and over	1,000 (sq. miles)	
Manitoba		18.76	3.07	42.06	2,197	3.19
Division	1	21.36	-	-	-	-
	2	16.45	7.07	6.26	23	16.73
	3	22.58	4.40	3.75	26	10.38
	4	13.40	17.53	-	25	7.40
	5	37.36	0.96	14.90	53	8.80
	7	12.40	3.38	43.54	26	14.32
	8	15.80	8.80	16.38	22	9.19
	9	57.17	2.22	12.15	12	37.32
	10	18.56	3.46	10.66	24	7.54
	11	17.21	9.39	5.98	29	9.64
	12	16.93	2.93	-	32	7.51
	13	11.43	5.42	16.37	33	7.30
	14	10.15	14.12	-	36	7.14
	15	22.16	9.67	-	23	4.34
	16	64.16	-	-	-	-
Saskatchewan		7.26	11.26	20.30	2,380	3.89
Division	1	8.12	18.08	7.07	59	6.99
	2	5.94	12.29	14.02	67	6.41
	3	7.12	13.56	5.53	76	6.13
	4	4.69	10.71	10.35	76	3.71
	5	4.63	19.50	9.30	58	9.37
	6	5.46	9.91	53.39	68	16.19
	7	4.03	8.67	35.28	75	8.46
	8	6.25	14.91	10.73	93	5.33
	9	5.90	7.91	13.70	50	12.08
	10	6.90	12.70	2.22	49	8.62
	11	2.74	9.13	51.99	60	14.71
	12	7.11	11.38	12.10	60	6.79
	13	6.66	16.79	5.30	68	6.23
	14	12.64	6.35	6.23	134	3.44
	15	8.52	8.17	15.80	81	10.36
	16	10.23	9.80	12.28	89	5.47
	17	15.38	10.27	3.58	69	3.95
	18	81.13	-	-	-	-
Alberta		10.66	6.92	31.15	2,488	2.94
Division	1	8.16	4.72	40.07	73	3.94
	2	12.55	4.56	44.06	63	9.02
	3	11.08	13.70	7.90	70	2.15
	4	12.04	20.44	5.00	61	4.75
	5	11.95	7.80	5.60	77	3.47
	6	10.24	4.54	62.43	106	13.27
	7	5.64	16.80	3.01	67	5.70
	8	8.07	9.07	6.76	65	9.37
	9	26.40	9.46	-	144	1.70
	10	5.69	7.70	5.97	62	9.39
	11	3.43	3.06	64.10	48	26.68
	12	34.70	2.52	11.20	131	1.06
	13	15.55	6.29	-	81	3.08
	14	9.58	6.44	-	87	4.53
	16	13.90	6.14	5.21	111	2.52
Average (of 45)		-	9.3	14.7	63	8.00

TABLE 14.—Growth in Rural and Urban Population by Census Divisions, Prairie Provinces, 1921-1931.

	Rural			Urban less than 1,000			Urban 1,000 or more		
	1931	1921	Increase or Decrease	1931	1921	Increase or Decrease	1931	1921	Increase or Decrease
Prairie Provinces	1,468,147	1,252,604	215,543	175,888	159,465	16,423	709,414	544,013	165,481
Manitoba	384,170	348,502	35,668	21,478	22,395	- 917	294,491	239,221	55,270
Division 1	22,817	20,009	12,808	-	-	-	-	-	-
2	33,646	32,642	1,004	2,743	3,500	- 757	2,421	1,268	1,158
3	24,576	22,070	2,506	1,174	1,972	- 798	1,003	-	1,003
4	15,054	14,180	874	3,199	3,061	138	-	-	-
5	38,898	28,390	10,508	444	1,208	- 764	6,886	4,185	2,701
6	37,088	27,757	9,331	-	-	-	246,740	201,327	45,413
7	18,582	19,251	- 669	1,248	1,162	86	17,082	15,397	1,685
8	14,855	14,701	154	1,740	1,891	- 151	3,251	3,071	180
9	38,889	34,476	4,413	1,008	214	794	5,517	4,838	679
10	15,387	17,083	-1,696	619	732	- 113	1,910	1,887	23
11	23,782	22,864	908	2,638	2,690	- 52	1,680	1,505	175
12	23,631	27,133	-3,502	713	617	96	-	-	-
13	18,977	21,306	-2,329	1,315	750	565	3,971	3,885	86
14	22,309	20,143	2,166	3,669	3,592	77	-	-	-
15	9,040	7,953	1,087	968	903	65	-	-	-
16	26,639	18,544	8,095	-	-	-	4,030	-	4,030
Saskatchewan	630,880	538,552	92,328	103,784	91,336	12,448	187,121	127,622	59,499
Division 1	31,096	26,851	4,245	7,512	6,156	1,356	2,936	2,290	646
2	31,561	27,796	3,765	5,263	5,425	- 162	6,007	3,193	2,814
3	37,938	32,671	5,267	6,354	4,118	2,236	2,591	2,112	479
4	22,178	19,313	2,865	3,033	1,837	1,196	2,915	2,148	767
5	38,418	36,582	1,837	10,520	10,054	466	5,010	3,907	1,103
6	44,358	42,227	2,131	10,901	11,105	- 204	54,647	35,871	18,776
7	35,441	35,539	- 98	5,481	5,589	- 108	22,308	19,285	3,023
8	36,705	36,591	114	7,360	5,557	1,703	5,296	3,518	1,778
9	47,454	44,551	2,903	4,792	4,321	471	8,293	8,383	- 90
10	35,530	30,292	5,238	5,318	5,734	- 416	1,042	-	1,042
11	34,101	32,599	1,502	8,133	8,584	- 451	45,742	26,840	18,902
12	30,974	28,077	2,897	4,620	5,044	- 424	5,018	2,764	2,254
13	33,237	28,583	4,654	7,136	6,897	239	2,259	1,003	1,256
14	40,409	20,863	19,546	2,935	1,653	1,282	2,878	1,746	1,132
15	63,643	49,626	14,017	6,838	5,204	1,634	13,216	11,454	1,762
16	37,966	26,260	11,706	4,784	2,899	1,885	5,986	4,108	1,878
17	23,534	15,655	7,879	2,804	2,256	548	977	-	977
18	6,339	4,445	1,894	-	-	-	-	-	-
Alberta	453,097	365,550	87,547	50,626	45,734	4,892	227,882	177,170	50,712
Division 1	15,909	17,663	-1,754	1,361	1,662	- 301	11,579	11,339	240
2	29,383	22,102	7,281	2,609	4,674	-2,065	25,194	20,037	5,157
3	11,804	13,915	-2,111	2,070	2,352	- 282	1,192	1,138	54
4	21,666	18,447	3,219	5,942	3,657	2,285	1,459	1,198	261
5	23,065	27,496	-4,431	2,096	2,360	- 264	1,490	1,364	126
6	46,436	40,735	5,701	6,384	6,150	234	87,804	65,804	22,000
7	30,556	30,262	294	6,403	6,881	- 478	1,147	-	1,147
8	45,250	40,457	4,793	5,537	4,882	655	10,229	11,581	-1,352
9	22,184	16,085	6,099	2,319	1,643	676	-	-	-
10	50,113	38,498	11,615	4,468	3,330	1,138	3,468	2,751	717
11	41,641	31,407	10,234	3,882	4,067	- 185	81,309	59,860	21,449
12	11,920	7,393	4,529	348	218	130	1,547	1,138	409
13	23,368	15,419	7,949	1,568	869	699	-	-	-
14	36,962	24,006	12,956	2,546	1,293	1,253	-	-	-
15	12,286	5,003	7,283	1,378	1,355	23	-	-	-
16	24,766	10,730	14,036	1,715	340	1,375	1,464	-	1,464
17	5,788	4,922	866	-	-	-	-	-	-

TABLE 15.--Rural Increase in Census Divisions, 1921-31 and Non-farm Rural Population in these Divisions in 1931.

Division		Per Cent Rural Increase 1921-31	Rural Population 1921	Absolute Increase 1921-31	Farm Population 1931	Rural Non-Farm Population 1931	Per Cent Rural Non- Farm of Rural Population
Alberta	15	14.5	5,003	7,283	8,669	3,617	29.5
"	16	130.8	10,730	14,036	20,844	3,922	15.8
Saskatchewan	14	93.7	20,863	19,546	34,568	5,841	14.5
Alberta	12	61.3	7,393	4,529	7,127	4,793	40.2
"	14	53.9	24,006	12,956	33,181	3,781	10.2
"	13	51.5	15,419	7,949	19,512	3,856	16.5
Saskatchewan	17	50.3	15,655	7,879	19,330	4,204	18.0
"	16	44.9	26,260	11,706	32,976	4,990	13.2
Manitoba	16	43.6	18,544	8,095	6,951	19,688	73.9
Saskatchewan	18	42.6	4,445	1,894	978	5,361	84.5
Alberta	9	37.9	16,085	6,099	15,715	6,469	29.2
Manitoba	5	37.0	28,390	10,508	21,626	17,272	44.4
"	6	33.6	27,751	9,331	19,632	17,456	47.1
Alberta	2	32.9	22,102	7,281	22,205	7,178	24.1
"	11	32.6	31,407	10,234	37,290	4,351	10.4
"	10	30.2	38,498	11,615	46,809	3,304	6.6
Saskatchewan	15	28.0	49,626	14,017	56,510	7,133	11.2
		45.5	362,177	164,958	403,923	123,216	30.5
Saskatchewan	10	17.6	30,292	5,238	32,647	2,883	8.2
Alberta	17	17.6	4,922	866	1,196	4,592	79.3
"	4	17.3	18,447	3,219	18,164	3,502	16.2
Saskatchewan	13	16.3	28,583	4,654	30,400	2,837	8.1
"	3	16.1	32,671	5,267	34,598	3,340	8.8
"	1	15.8	26,851	4,245	27,722	3,374	10.8
"	4	14.8	19,313	2,865	20,858	1,320	6.0
Manitoba	1	14.0	20,009	2,808	17,944	2,808	21.4
Alberta	6	14.0	40,735	5,701	32,041	14,395	31.0
Manitoba	15	13.7	7,953	1,087	6,822	2,218	24.5
Saskatchewan	2	13.6	27,796	3,765	29,017	2,544	8.0
Manitoba	9	12.8	34,476	4,413	12,924	25,965	66.7
Alberta	8	11.8	40,457	4,793	40,327	4,923	10.9
Manitoba	3	11.4	22,070	2,506	18,534	6,042	24.6
"	14	10.8	20,143	2,166	19,673	2,636	11.9
Saskatchewan	12	10.3	28,077	2,897	28,085	2,889	9.5
Manitoba	4	6.9	14,180	874	12,606	2,448	16.2
		13.8	416,975	57,364	383,558	88,716	23.1
Saskatchewan	9	5.9	44,551	2,903	43,881	3,573	7.6
"	5	5.0	36,581	1,837	35,920	2,498	6.5
"	6	5.0	42,227	2,131	38,353	6,005	15.7
"	11	4.6	32,599	1,502	31,691	2,410	7.1
Manitoba	11	4.0	22,864	908	18,845	4,937	27.3
"	2	3.1	32,642	1,004	27,261	6,385	19.0
"	8	1.0	14,701	154	11,718	3,137	21.1
Alberta	7	1.0	30,262	294	28,407	2,129	7.0
Saskatchewan	8	0.3	36,591	114	33,619	3,149	8.6
"	7	-0.3	35,539	-98	32,859	2,582	7.3
Manitoba	7	-3.5	19,251	-669	14,004	4,578	24.7
Alberta	1	-10.0	17,663	-1,754	13,555	2,354	14.9
Manitoba	10	-10.0	17,083	-1,696	12,063	3,324	22.0
"	13	-10.9	21,306	-2,329	16,193	2,784	14.8
"	12	-12.9	27,133	-3,502	19,509	4,122	17.5
Alberta	3	-15.1	13,915	-2,111	10,134	1,670	14.1
"	5	-16.1	27,496	-4,431	19,881	3,184	13.8
		-1.2	472,404	-5,743	407,893	58,821	14.4

It is apparent from tables 14 and 15 that the population growth in the Prairie Provinces between 1921 and 1931 was 215,543 rural, 16,423 urban under 1,000 and 165,481 urban over 1,000; i.e. 181,904 total urban. Evidently the slow increase of the aggregate of small urban places was partly due to a change in category from places of under 1,000 to places of over 1,000, so that there is but little significance in this slow growth. In the ten years the rural population increased 17.3 p.c. and the urban 25.8 p.c. Of the 215,543 increase in rural population 164,958 or nearly 80 p.c. took place in 17 divisions, ten of these being higher latitude divisions. In some of these there was more non-farm than other urban population. The point emphasized is that the increases in the rural population were not necessarily increases in farm population. In fact tables 11 and 12 show that there is a correlation between the increase in rural population and the per cent non-farm indicating that a good deal of the increase in rural population was due to that in the non-farm population. This was true generally of the provinces of Canada in 1921-31. Thus of the 51 divisions, the first 17 showed 45.5 p.c. rural increase and 30.5 non-farm population; the next 17 showed 13.8 rural increase and 23.1 non-farm while the last 17 showed a net decrease of 1.4 rural and a non-farm population of 14.4.

2.--COMPOSITION OF THE POPULATION.

As mentioned at the beginning of this study the treatment of the composition of the population is secondary since it is largely included in that of the movement, e.g. the composition as between rural and urban, immigrant and native; province born and other Canadian born. The question of composition is many-sided and the significance of its various elements needs lengthy treatment that can not be attempted in a short study. Moreover, as pointed out above, much of the relevant material is already well known. Consequently this section of the study will consist merely of a number of miscellaneous tables (Tables 16-22) intended as a convenient source of reference. These tables cover briefly the subjects of age, citizenship, British and non-British birth, average time in the country, etc.

As regards some of the following tables^a few words of explanation may be necessary. Age distribution, for instance, is one of the most fundamental attributes of the population, but a mere description of age distribution means very little. Naturally, the age composition of the Prairie Provinces is different from that of the older provinces. This is not because the Prairie Provinces are new and the others old, but because the former are more immigrant than the latter. Table 16 and chart 1 show the per cent distribution by quinquennial age groups in the Prairie Provinces as compared with the remainder of Canada. It will be noted that there is an important difference between the two sections of the chart at the middle ages. The Prairie Provinces have large proportions between the ages of 30 and 50, which cause a decided hump in the main structure. The peak of the hump was at a lower age in 1921 and still lower in 1911 while it did not exist before that time. Immigrants arrived mainly at ages 20 to 30 and following the main wave of immigration (1901-11) there was a decided excess around the age of 30 which excess has been travelling on to older and older ages since. In twenty years or so more it will have crept on to over seventy and the number over seventy years of age, at present very small, will then be very large. This glimpse into the future envisages new problems. Old age pensions, for instance, at the present time, and at that future date are drastically different problems.

TABLE 16.--Per Cent Distribution by Age Groups of the Population of the Prairie Provinces and the Remainder of Canada, Both Sexes, 1931.

Age	Prairie Provinces	Other Canada	Age	Prairie Provinces	Other Canada	Age	Prairie Provinces	Other Canada
Total	100.00	100.00	30 - 34	6.58	6.91	65 - 69	1.64	2.40
0 - 4	10.63	10.28	35 - 39	6.65	6.63	70 - 74	1.14	1.80
5 - 9	11.39	10.78	40 - 44	6.58	6.12	75 - 79	.59	1.06
10 - 14	11.30	10.08	45 - 49	5.96	5.55	80 - 85	.26	.54
15 - 19	10.72	9.82	50 - 54	4.58	4.75	85 - 89	.09	.21
20 - 24	8.98	8.73	55 - 59	3.08	3.67	90 - 94	.02	.06
25 - 29	7.56	7.59	60 - 64	2.23	3.02	95 - 99	.01	.01
						100 +	-	-

There is no doubt that the excess of persons at the early middle ages has had an important bearing upon the psychology of the Prairie Provinces, especially during the first two decades of the century. Not only did an excess occur at these ages but it was an excess of single adult males at the ages of highest rates of earning coupled with absence of family responsibilities, who would look upon expenditures and projects involving expenditures, also upon permanency

of settlement very differently than would the family man. The few families who settled at the same time were treated very generously in such matters as educational facilities, but they were treated thus generously at the expense of the future rather than the present. The children who were thus educated are now bearing a heavy burden for their own education. This feature has very little connection with the type of people settling the prairies - it is a natural function of age distribution and the single (conjugal) condition. It seems inseparable from the manner of settlement, i.e. the fact that the prairies were settled by a transplanted population, consisting of single males at the most vigorous period of life.

Another point of importance is that after this first period of single male settlement, these males married or brought in their families. The result was a sudden huge birthrate and a rapid change from slight family or dependency responsibility to very heavy responsibility. The prairies have passed very rapidly through these two changes. It is not difficult to imagine a change in psychology - extreme optimism to pessimism. If all this be true, what was said in the beginning about the Prairie Provinces becoming rapidly indigenous would seem to have an important bearing upon the future. An indigenous population is apt to be normal in respect of the forms of psychology mentioned. In the course of very little time this indigenous population will be the adults and the family men and women. It is only then that the country may be considered as being really settled.

As a further introduction to the miscellaneous tables two additional points need to be explained. Table 22 gives a summary of various age attributes of the population, particularly the vital attributes and earnings. The actual earnings as compared with the potential earnings on the basis of age distribution are shown side by side. The potential earnings are calculated by first finding the earnings at each age of the Canada population as a whole, then applying exactly the same age-earning rate to the age distribution of each province and thus ascertaining which provinces are most favourably situated by virtue of age distribution in respect to earnings. The same is done for birth rate, death rate, etc. The rates thus ascertained are called the potential rates. Where the actual rate is higher than the potential rate, something else besides age is operative. Thus if the actual death rate is lower than the potential death rate it would seem that the province is situated favourably in other respects than age towards this attribute. In this respect Saskatchewan is the most favoured province in the Dominion. This may mean that the climate is the healthiest or that the population is more vigorous or, of course, several other things. At any rate the low death rate is not entirely due to favourable age distribution.

Another important point is the time in Canada of the population. The native born are considered as living all their lives (ad hoc) in the province, while the actual number of years in Canada of the immigrant population is known. Since 60 years is the present life expectation at birth, 60 years in Canada is considered a "life population". We know the total population and it is interesting, to say the least, to know how great a life population each province has. This is shown in Table 20. The figures of this table reflect the youth of these provinces; i.e. they have a lower life population in terms of the actual population than the other provinces. The difference is great and would seem a better measure of the age of the province than the date of formation or other like measures.

TABLE 17.—Population of Canada and the Prairie Provinces by Birthplace, 1931.

Birthplace	Canada	Prairie Provinces	Manitoba	Saskatchewan	Alberta
Canadian born	8,069,261	1,492,657	463,550	603,240	425,867
Prairie Provinces	1,302,381	1,209,756	389,738	488,421	331,597
Other Provinces	6,766,880	282,901	73,812	114,819	94,270
British born	1,184,830	315,917	106,151	101,001	109,765
Foreign born	1,122,695	544,955	130,438	217,544	196,973
TOTAL	10,376,786	2,353,529	700,139	921,785	731,605

Per Cent Distribution

Birthplace	Canada	Prairie Provinces	Manitoba	Saskatchewan	Alberta
Canadian born	77.76	63.42	66.21	65.44	58.21
Prairie Provinces	12.55	51.40	55.67	52.98	45.32
Other Provinces	65.21	12.02	10.54	12.46	12.89
British born	11.42	13.43	15.16	10.96	14.87
Foreign born	10.82	23.15	18.63	23.60	26.92
TOTAL	100.00	100.00	100.00	100.00	100.00

TABLE 18.—The Prairie Provinces Compared with the Remaining Provinces of Canada
in Different Types of Population, 1931.

	Province- born Population Living in Province	Province Born Living in Other Parts of Canada	Natural Increase	Immigrants and Returning Canadians (fiscal year 1931)	Total Population	Population Canadian Born	Population of British Races	Non-alien Population
P. E. Island	82,724	17,014	967	313	88,038	85,251	73,758	87,433
Nova Scotia	454,944	52,291	5,647	1,939	512,846	471,049	391,878	506,570
New Brunswick	360,149	42,900	6,157	2,053	408,219	383,818	255,567	404,150
Quebec	2,541,913	154,209	49,119	15,780	2,874,255	2,622,510	432,726	2,803,697
Ontario	2,478,898	315,733	33,504	27,000	3,431,683	2,627,398	2,539,771	3,282,093
Manitoba	373,686	89,856	9,057	6,753	700,139	463,550	368,010	646,453
Saskatchewan	442,040	60,125	15,265	4,412	921,785	603,240	437,836	843,262
Alberta	300,200	36,474	11,950	5,377	731,605	425,867	389,238	642,594
British Columbia	233,195	14,546	4,290	4,833	694,263	374,733	489,923	618,183
Yukon	1,768	412	-	11	4,230	2,658	1,741	3,734
Northwest Territories	7,880	392	-	4	9,723	9,184	623	9,478
CANADA	7,277,397	783,952	135,956	68,495	10,376,786	8,069,258	5,381,071	9,847,647

TABLE 19.—Mean Ages of Native Population and Time in Canada of Immigrant Population, 1931.

Province	Actual Population		Mean age of Canadian Born	Average years of Residence in Canada of Immigrants
	Canadian Born	Immigrant		
CANADA	8,054,526	2,297,430	25	17
P. E. Island	85,244	2,740	30	9
Nova Scotia	470,949	41,530	28	18
New Brunswick	383,755	24,310	27	17
Quebec	2,621,936	250,896	25	17
Ontario	2,626,718	801,126	28	13
Manitoba	463,460	235,846	21	20
Saskatchewan	603,134	316,984	19	19
Alberta	425,795	305,323	19	18
British Columbia	373,535	318,675	23	20

TABLE 20.—Average Number of Persons Spending a Life Time (60 years) in Canada
Expressed as a Percentage of the Total Population.

Province	Life Population (Canadian Born)	Life Population (Immigrant)	Total Life Population	Life Population as a per cent of Total Population
CANADA	3,360,122	632,914	3,993,036	39
P. E. Island	42,622	416	43,038	49
Nova Scotia	223,407	10,765	234,172	46
New Brunswick	171,730	6,738	178,468	44
Quebec	1,086,311	69,833	1,156,144	40
Ontario	1,208,241	173,310	1,381,551	40
Manitoba	162,597	77,357	239,954	34
Saskatchewan	188,479	100,423	288,902	31
Alberta	134,480	89,204	223,684	31
British Columbia	142,255	104,868	230,409	36

AGE DISTRIBUTION PRAIRIE PROVINCES OF THE REST OF CANADA

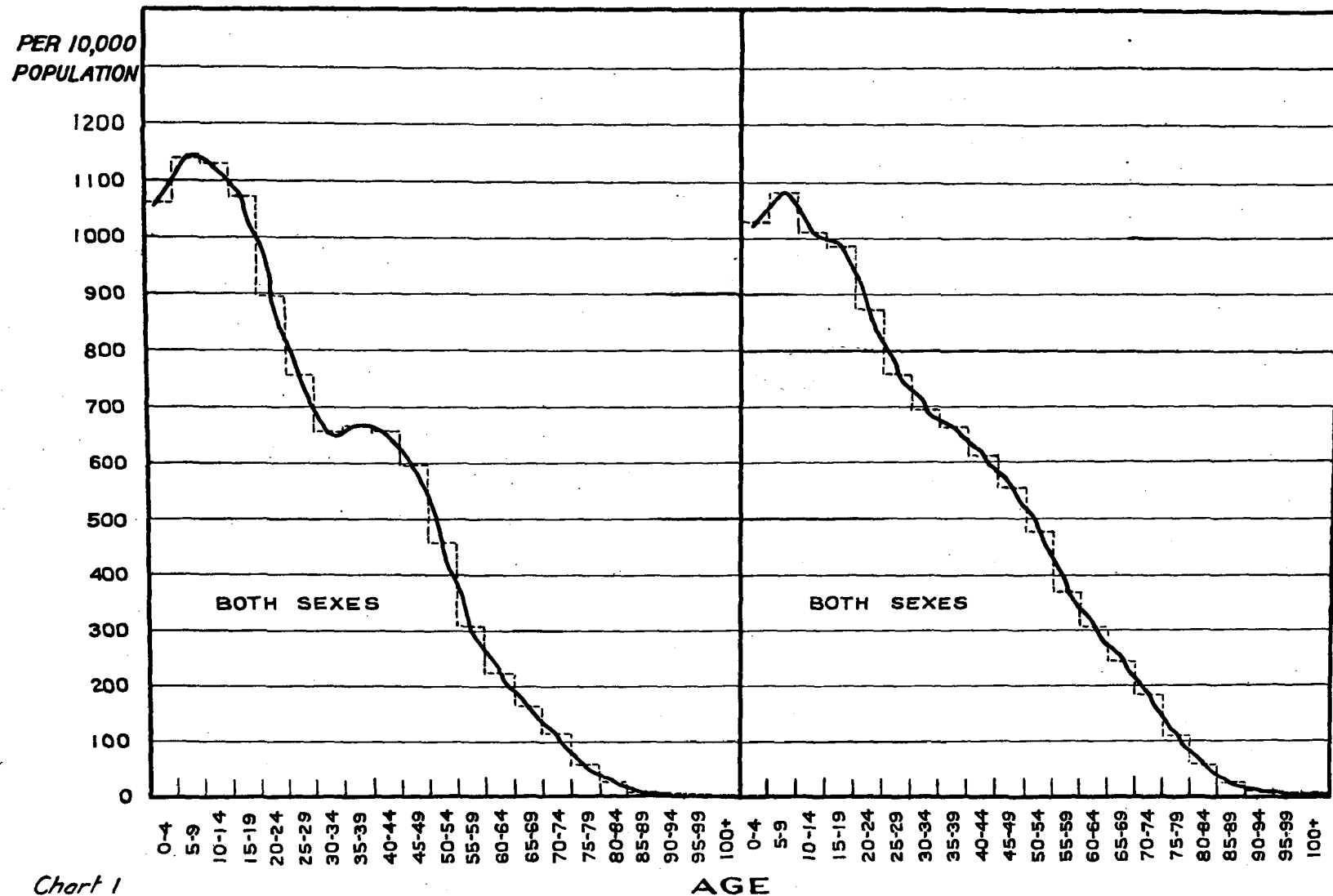


Chart 1

TABLE 21.—Canada by Provinces per 1,000, 1931: Certain Attributes of the Population
Expressed as Ratios to the Total Population.

Province	Birth Rate	Death Rate	Vital Index	Marriage Rate	Infantile Mortality	Mean Age	Masculinity	Per cent Gainfully Occupied	Per cent ^x at School	Per cent British Races	Per cent Non-alien
P. E. Island	21.4	10.4	2.1	5.6	68.1	30.1	1.064	36.5	22.6	83.8	99.3
Nova Scotia	22.6	11.6	1.9	6.6	78.7	24.7	1.054	35.3	25.9	76.4	98.8
New Brunswick	26.5	11.4	2.3	6.2	87.4	27.3	1.045	34.3	24.0	62.6	99.0
Quebec	29.1	12.0	2.4	5.8	112.9	25.9	.986	35.6	23.6	15.1	97.5
Ontario	20.2	10.4	1.9	6.9	69.8	30.1	.962	39.2	25.3	74.0	95.6
Manitoba	20.5	7.6	2.7	7.0	64.3	27.6	1.108	38.7	25.3	52.6	92.3
Saskatchewan	23.1	6.6	3.5	6.2	68.6	25.6	1.185	36.8	26.6	47.5	91.5
Alberta	23.6	7.2	3.3	7.0	69.4	26.8	1.208	39.1	24.6	53.0	87.8
British Columbia	15.0	8.8	1.7	5.6	49.4	31.5	1.246	44.1	20.4	70.6	89.0
CANADA (nine provinces)	23.2	10.1	2.3	6.4	84.7	28.1	1.074	37.9	24.5	51.9	94.9

† Births divided by deaths.

x The figures are taken from the Annual Survey of Education instead of the census for certain reasons: (1) that the census does not show the year's enrolment after June 1; (2) probably does not show persons belonging to the province but going to school elsewhere; (3) probably does not show all the persons going to higher institutions, night schools etc. The census figures refer only to persons enumerated as on June 1, 1931.

TABLE 22.—Canada 1931. Actual Rates of Vital Attributes and Employment Attributes as Compared
with the Potential Rates arising from the Age and Sex Distribution.

Note: The specific rates for each age group of Canada as a whole are used in determining the potentialities; the only variable as between provinces being the age and sex distribution.

Province	Births			Deaths			Marriages		
	Actual Rate	Potential Rate	A:P	Actual Rate	Potential Rate	A:P	Actual Rate	Potential Rate	A:P
	(%) A	(%) P		(%) A	(%) P		(%) A	(%) P	
CANADA	2.3			1.01			0.64		
P. E. Island	2.1	1.9	1.11	1.04	1.36	0.76	0.56	0.57	0.98
Nova Scotia	2.3	2.0	1.15	1.16	1.21	0.96	0.66	0.59	1.12
New Brunswick	2.7	2.0	1.35	1.14	1.12	1.02	0.62	0.59	1.05
Quebec	2.9	2.2	1.32	1.20	0.97	1.24	0.58	0.66	0.88
Ontario	2.0	2.3	0.87	1.04	1.07	0.97	0.69	0.64	1.08
Manitoba	2.1	2.3	0.91	0.76	0.90	0.84	0.70	0.69	1.01
Saskatchewan	2.3	2.2	1.05	0.66	0.85	0.78	0.62	0.64	0.97
Alberta	2.4	2.4	1.00	0.72	0.85	0.85	0.70	0.66	1.06
British Columbia	1.5	2.4	0.63	0.88	0.97	0.91	0.56	0.63	0.89

Province	Gainfully Occupied			Earning Capacity		
	Actual Rate (%) A	Potential Rate (%) P	A:P	Actual Rate (Dollars per person per year) A	Potential Rate (Dollars per person per year) P	A:P
CANADA	37.85			849		
P. E. Island	36.54	35.61	1.03	594	768	0.77
Nova Scotia	35.31	35.78	0.99	700	844	0.83
New Brunswick	34.30	34.38	1.00	686	828	0.83
Quebec	35.58	34.77	1.02	823	821	1.00
Ontario	39.23	38.74	1.01	925	856	1.08
Manitoba	38.66	38.66	1.00	846	854	0.99
Saskatchewan	36.77	37.80	0.97	714	835	0.86
Alberta	39.12	39.89	0.98	834	870	0.96
British Columbia	44.11	44.34	0.99	853	810	0.94

3.--GENERAL SUMMARY.

On the basis of the foregoing data on the manner of settlement and the composition of the population the following conclusions concerning the growth and development of the population of the Prairie Provinces may be listed:

1. While there was a very rapid growth in the population of the Prairie Provinces in the first ten to fifteen years of the century this growth has not been maintained and latterly is barely keeping up to expectations even from natural increase. This is due partly to an exodus in 1921-26 but no single set of conditions can be held solely responsible for the arrest in growth.
2. The growth of the population has been attended by a more than ordinary casualty list. The natural increase has been most economical; i.e. a high birth rate with a low death rate; but the chief source of growth up to recent years has been on a most wasteful scale - nearly two million immigrant incomers to build up a present immigrant population of less than 800,000. The incomers from other provinces of Canada have been much more consistent settlers. Thus out of (an estimated number of) 400,000 incomers from other provinces 282,000 were living in the prairies in 1931 (a certain number of the original incomers having died meanwhile). The number who have gone back to the rest of Canada must be comparatively small in addition to the Prairie Province-born children they carried back with them. We have no estimate of the province-born children returning with the immigrants, but judging from the proportions carried back by the ex-prairie Canadian born, this number must be very considerable.
3. The Prairie Province population is becoming rapidly indigenous; i.e. Prairie Province born. It is a striking fact that out of an estimated mean population of 1,152,000 in the thirty years there is an almost equal number of Prairie Province born; while out of the immigrant arrivals above mentioned there is left less than 800,000. This process of becoming indigenous should have a very important bearing upon the psychology and stability of the population.
4. The growth of the population has been attended by more than ordinary mobility, in addition to that reflected in the movement in and out. Thus the population of Alberta moved 15 miles north in 1921-31. This movement is due not only to persons coming in from outside but, to a great extent, to persons moving from one part of the Prairie Provinces to another. Map 1 shows this graphically. The central parts of the provinces showed heavy losses in the last decade while the southern and particularly the northern showed great gains. Perhaps the significance of the northern movement of the centre in Alberta (15 miles) will be rendered more vivid if we add that this is equivalent to saying that during the ten years the whole population moved northward at an average of about one foot an hour travelling every hour in the day. At the same time there was an easterly movement rather than westerly, and also a southerly movement.
5. The movement from rural to urban was considerable as judged by the increased proportion of urban in 1931, but such a movement is not easily measured. The urban movement is generally towards large cities and consequently would be to cities of Canada outside the Prairie Provinces. However, there are indications that the northerly movements were not from one set of farms to another set of farms, but into occupations other than farming. The increase in the rural population correlates with the size of the rural non-farm population (See table 15).
6. The rural population in 1931 was very thinly scattered over the surveyed areas - 5 persons to the square mile. The population was comparatively evenly spread over the surveyed areas of Saskatchewan but not so over Alberta and Manitoba. Judging from the accompanying map and table 5 this would seem to indicate that Saskatchewan is "settled" to a greater extent than the other two provinces.
7. At the present moment the population of the Prairie Provinces is very favourably situated in respect to many population attributes such as age, rate of natural increase, low death rate and earning rates. For this, the age distribution is partly, but not altogether, responsible.

CHAPTER III.--PRODUCTION AND INDUSTRY

PART I.--INTRODUCTORY--GENERAL SURVEY OF PRODUCTION.

A broad view of the production of commodities in the Prairie Provinces is presented in table 1.[†] The basic industry, in these provinces is agriculture. Of the several branches of industry contributing to the total net value of \$375,328,000 in 1932, agriculture provided \$227,513,000 or 60.6 per cent of the total; manufactures \$95,204,000 or 17.8 per cent; mining \$31,923,000 or 8.5 per cent; and electric power \$15,693,000 or 4.2 per cent. For comparative figures for earlier years see table 1.

The relative importance of agriculture is declining. It contributed 70.3 per cent of the total output in 1921; 80.3 per cent in 1925 and in 1930 and 1931 less than 46 per cent, the latter figures reflecting not only crop reduction but drastic price declines. In 1932 agriculture contributed 60.6 per cent of the total net production of the Prairie Provinces.

More than 72 per cent of the output of Saskatchewan, 54 per cent of that of Alberta and 37 per cent of that of Manitoba were obtained from farming in 1929. In 1931 the proportions were: Saskatchewan 54 per cent; Alberta 56 per cent; and Manitoba 25 per cent, while in 1932 they were: Saskatchewan 78 per cent; Alberta 63 per cent and Manitoba 36 per cent.

Manufacturing held second place in Saskatchewan and Alberta in 1932 while in Manitoba it ranked ahead of agriculture. Mineral production, consisting chiefly of coal-mining, held third place in Alberta. For further details see table 1.

There are, of course, many other activities such as transportation, merchandising, professional services, etc., which are also productive in a broad economic sense but their values cannot be accurately determined.

TABLE 1[†].--Value of Production in Prairie Provinces and Canada by Leading Industrial Divisions, 1921-32.

		Manitoba		Saskatchewan		Alberta		Prairie Provinces			C A N A D A		
		Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Per Cent of Net	Gross \$000	Net \$000	Per Cent of Net
Agriculture	- 1921	101,274	74,942	251,576	205,616	124,968	89,592	477,818	370,150	70.3	1,485,110	1,092,423	38.9
	1923	88,226	68,473	290,259	253,860	206,852	177,859	585,347	500,192	77.5	1,440,395	1,107,572	36.3
	1925	146,709	112,483	418,482	334,635	250,005	194,560	815,196	641,678	80.3	1,792,829	1,342,889	40.4
	1927	129,026	104,844	413,636	370,435	334,978	301,911	877,640	777,190	78.1	1,917,999	1,522,949	39.0
	1929	126,062	68,275	305,028	173,110	228,594	128,327	659,684	369,712	55.9	1,729,821	1,034,130	26.2
	1930	95,892	46,677	194,549	77,595	169,512	86,510	459,953	210,782	45.7	1,346,364	758,792	23.6
	1931	55,894	28,201	111,014	44,267	142,277	91,778	309,185	164,246	45.5	880,054	538,192	21.5
	1932	53,560	36,315	128,107	91,668	126,442	99,530	308,109	227,513	60.6	818,550	565,418	26.9
Forestry	- 1921	4,204	3,327	2,375	2,236	3,338	2,982	9,917	8,545	1.6	348,033	263,236	9.4
	1923	5,073	4,012	2,438	2,278	3,671	3,266	11,182	9,556	1.5	426,696	313,749	10.3
	1925	5,534	4,415	2,585	2,389	3,821	3,378	11,940	10,182	1.3	434,746	313,413	9.4
	1927	7,210	6,351	3,052	2,750	6,336	5,302	16,598	14,403	1.5	453,695	311,915	8.0
	1929	8,760	6,735	5,687	5,291	9,097	7,720	23,544	19,746	3.0	495,593	337,649	8.5
	1930	8,172	6,326	6,121	5,686	8,287	7,186	22,580	19,198	4.2	440,352	303,145	9.4
	1931	6,026	4,973	4,933	4,787	5,738	5,362	16,697	15,122	4.2	288,674	200,650	8.0
	1932	2,146	1,870	2,075	1,959	3,574	3,154	7,795	6,983	1.9	195,025	133,402	6.4

[†] Table 1, it may be explained, is designed to give an inclusive statement for each general industry and at the same time prevent duplication in connection with "border-line" products e.g. dairy factories are included under agriculture, saw-mills and pulp mills under forestry, cement and clay products under mining etc.; and are also included under manufactures, but the duplication is eliminated from the grand total. "Net" production represents an attempt to eliminate the value of all material consumed in the production process.

TABLE I.--Value of Production in Prairie Provinces and Canada by Leading Industrial Divisions, 1921-32 .. Cont'd.

		Manitoba		Saskatchewan		Alberta		Prairie Provinces			C A N A D A		
		Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Per Cent of Net	Gross \$000	Net \$000	Per Cent of Net
Fisheries	- 1921	1,038	1,028	243	243	410	409	1,691	1,680	0.3	43,456	34,932	1.2
	1923	1,021	1,021	287	287	439	439	1,747	1,747	0.3	54,019	42,566	1.4
	1925	1,467	1,467	495	495	459	459	2,421	2,421	0.3	61,896	47,942	1.4
	1927	2,040	2,040	504	504	712	712	3,256	3,256	0.4	63,877	49,497	1.3
	1929	2,745	2,745	573	573	732	732	4,050	4,050	0.6	70,580	53,519	1.4
	1930	1,812	1,812	235	235	421	421	2,468	2,468	0.5	63,743	47,804	1.5
	1931	1,242	1,242	318	318	154	154	1,714	1,714	0.5	39,655	30,517	1.2
	1932	1,205	1,205	186	186	154	154	1,545	1,545	0.4	33,666	25,957	1.2
Trapping	- 1921	1,051	1,051	717	717	1,081	1,081	2,849	2,849	0.5	9,764	9,764	0.3
	1923	1,656	1,656	2,242	2,242	1,817	1,817	5,715	5,715	0.8	16,165	16,165	0.5
	1925	1,567	1,567	1,797	1,797	2,006	2,006	2,006	5,370	0.7	14,778	14,778	0.4
	1927	1,558	1,558	1,610	1,610	2,179	2,179	5,347	5,347	0.5	17,641	17,641	0.4
	1929	1,143	1,143	2,149	2,149	2,303	2,303	5,595	5,595	0.8	16,356	16,356	0.4
	1930	669	669	1,260	1,260	999	999	2,928	2,928	0.6	9,876	9,876	0.3
	1931	527	527	1,033	1,033	951	951	2,511	2,511	0.7	8,745	8,745	0.4
	1932	530	530	916	916	626	626	2,072	2,072	0.5	7,118	7,118	0.3
Mining	- 1921	1,934	1,934	1,114	1,114	30,562	30,562	33,610	33,610	6.4	180,920	171,923	6.1
	1923	1,768	1,768	1,048	1,048	31,288	31,288	34,104	34,104	5.3	229,056	214,079	7.0
	1925	2,277	2,277	1,076	1,076	25,319	25,319	28,672	28,672	3.6	253,913	226,583	6.8
	1927	2,889	2,889	1,455	1,455	29,309	29,309	33,653	33,653	3.4	279,873	247,357	6.3
	1929	5,424	5,424	2,254	2,254	34,740	34,740	42,418	42,418	6.4	352,267	310,850	7.9
	1930	6,042	5,453	2,369	2,369	30,620	30,620	39,031	38,442	8.3	325,184	279,874	8.7
	1931	11,746	9,966	1,932	1,932	23,581	23,581	37,259	35,479	9.8	276,365	228,029	9.1
	1932	11,243	9,058	1,682	1,682	21,183	21,183	34,108	31,923	8.5	228,948	191,228	9.1
Electric Power	- 1921	3,148	3,148	2,435	2,435	3,090	3,030	8,673	8,613	1.6	73,377	58,262	2.1
	1923	3,647	3,293	2,672	2,660	3,067	2,827	9,386	8,780	1.4	91,141	67,497	2.2
	1925	4,767	4,246	2,862	2,849	3,534	3,202	11,163	10,297	1.3	102,588	79,342	2.4
	1927	6,058	5,409	3,390	3,372	3,982	3,580	13,430	12,361	1.2	134,819	104,033	2.7
	1929	7,546	6,443	4,235	4,170	5,119	4,386	16,900	14,999	2.3	157,499	122,883	3.1
	1930	7,715	6,574	5,471	4,711	5,540	4,652	18,726	15,937	3.5	164,834	126,038	3.9
	1931	8,004	6,779	5,290	4,455	5,571	4,675	18,865	15,909	4.4	163,322	122,311	4.9
	1932	7,966	6,534	5,313	4,478	5,528	4,681	18,807	15,693	4.2	171,631	128,420	6.1
Construction	- 1921	18,642	12,062	8,075	5,221	5,821	3,767	32,538	21,053	4.0	259,642	169,049	6.0
	1923	9,993	6,464	5,793	3,750	7,066	4,540	22,852	14,754	2.3	324,746	212,155	7.0
	1925	13,116	8,626	4,923	3,200	3,868	2,511	21,907	14,337	1.8	310,215	202,103	6.1
	1927	24,044	15,609	22,127	14,390	17,910	11,604	64,081	41,603	4.2	435,359	283,263	7.3
	1929	38,198	24,829	34,184	22,220	29,160	18,954	101,542	66,003	10.0	594,145	386,709	9.8
	1930	22,010	14,307	27,361	17,785	25,081	16,303	74,452	48,395	10.5	456,995	297,047	9.2
	1931	13,798	8,969	9,200	5,980	14,335	9,318	37,333	24,267	6.7	315,482	205,063	8.2
	1932	4,504	2,927	2,705	1,758	5,948	3,866	13,157	8,551	2.3	132,872	86,367	4.1
Custom & Repair	- 1921	7,902	4,808	6,037	3,732	6,030	3,921	19,969	12,461	2.4	89,109	57,956	2.1
	1923	7,228	4,505	5,564	3,631	5,892	3,825	18,684	11,961	1.8	90,837	58,053	1.9
	1925	7,473	4,772	6,020	3,849	6,341	4,051	19,834	12,672	1.5	96,280	61,534	1.9
	1927	9,006	5,755	7,254	4,635	7,642	4,883	23,902	15,273	1.5	116,082	74,174	1.9
	1929	12,355	8,305	11,722	7,266	10,820	6,960	34,897	22,531	3.4	143,877	99,618	2.5
	1930	11,700	7,860	9,680	6,090	10,700	6,990	32,080	20,940	4.5	123,000	85,200	2.7
	1931	9,764	7,375	6,880	4,958	7,756	5,519	24,400	17,882	5.0	97,000	71,000	2.9
	1932	7,920	5,747	5,627	3,998	6,379	4,519	19,926	14,264	3.8	78,000	57,000	2.7

TABLE 1.—Value of Production in Prairie Provinces and Canada by Leading Industrial Divisions 1921-32 - Cont'd.

		Manitoba		Saskatchewan		Alberta		Prairie Provinces			C A N A D A		
		Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Gross \$000	Net \$000	Per Cent of Net	Gross \$000	Net \$000	Per Cent of Net
Manufactures(a) -	1921	101,891	41,646	38,511	12,657	57,230	23,020	197,632	77,323	12.9	2,576,037	1,209,143	33.9
	1923	97,335	41,361	34,338	15,004	54,338	22,725	186,011	79,090	9.1	2,781,166	1,311,025	33.4
	1925	124,146	52,463	40,093	15,740	75,114	29,258	239,353	97,461	9.2	2,948,545	1,360,880	31.2
	1927	142,090	62,580	52,181	20,016	84,987	34,376	279,258	116,972	9.2	3,425,499	1,635,924	33.7
	1929	164,909	75,751	80,501	29,292	107,557	44,124	352,967	149,167	17.6	4,063,987	1,997,350	40.2
	1930	142,425	67,664	62,277	26,669	94,315	40,693	299,017	135,026	22.2	3,428,971	1,761,987	40.7
	1931	118,541	63,391	44,265	21,725	68,367	32,277	231,173	117,393	23.2	2,698,462	1,474,582	43.8
	1932	96,056	50,465	36,102	17,887	55,294	26,852	187,452	95,204	17.8	2,126,195	1,170,226	43.2
Total (b)	- 1921	232,239	139,819	306,410	232,037	223,649	154,377	762,298	526,233	100.0	4,627,868	2,809,974	100.0
	1923	202,478	124,229	336,459	280,023	301,105	241,241	840,042	645,493	100.0	4,946,900	3,051,457	100.0
	1925	290,363	181,978	467,632	360,434	356,166	257,041	1,114,161	799,453	100.0	5,412,658	3,325,116	100.0
	1927	305,571	196,170	494,428	413,119	472,751	385,303	1,272,750	994,592	100.0	6,167,384	3,901,505	100.0
	1929	342,731	185,231	432,317	238,782	409,642	237,494	1,184,690	661,507	100.0	6,846,171	3,946,609	100.0
	1930	273,174	142,170	296,157	134,134	329,899	184,659	899,230	460,963	100.0	5,601,881	3,216,747	100.0
	1931	199,686	113,396	173,337	82,691	255,520	164,948	628,543	361,035	100.0	4,157,733	2,500,204	100.0
	1932	164,911	100,453	172,863	117,859	214,177	157,016	551,951	375,328	100.0	3,366,511	2,104,908	100.0

EMPLOYMENT IN THE PRAIRIE PROVINCES, 1921-34.

As a sidelight on productive activity and recent industrial conditions in the Prairie Provinces the monthly record of employment maintained in the Dominion Bureau of Statistics is of value. This record is based on monthly returns made to the Bureau by employers having 15 or more employees; the statistics are representative of practically all industries except agriculture, hunting, fishing and highly specialized business operations such as banking, insurance, etc. Since agriculture bulks so large in the economic life of the Prairie Provinces the record of employment in other industries presents a less accurate picture of economic conditions than in the case of other parts of Canada. Nevertheless, it is true that, normally, employment in these industries reflects to a large extent conditions in agriculture.

In table 2 is given a series of index numbers showing the comparative activity of employment in the various economic areas throughout Canada and in certain of the larger cities. Table 3 presents a survey of the employment situation in the Prairie Provinces, by industries as of January 1, April 1, July 1 and October 1, during the years 1927-34.

In the Prairie Provinces, as throughout Canada, employment reached its peak in the year 1929. Towards the end of that year there was considerable unemployment, the West being particularly affected as a result of the small harvest and of grain congestion, while the stock market crash also had a retarding effect upon industry. On the whole, however, employment was in decidedly greater volume than in any other year on record.

The 1930 index numbers reflect the general slackening in industrial activity from which not only Canada but practically the whole world suffered. Towards the close of the year the influence of public unemployment relief measures lessened seasonal contraction and to some extent prevented the index from sinking to still lower levels. In the West continued unfavourable conditions in agriculture resulted not only in much unemployment among farm workers but had a very depressing effect upon business in general.

The curtailment in industrial activity became more pronounced during 1931. In the Prairie Provinces employment showed violent fluctuations, the index ranging from 97.7 on April 1 to 130.0 at the beginning of September. Expressed as a percentage of the 1926 average of the reporting firms, employment, somewhat paradoxically, appeared in greater volume in these provinces than elsewhere in the Dominion; this was largely due to the vigorous unemployment

(a) Manufactures include certain duplication eliminated from the total. (b) Percentage adjusted.

relief programme carried on by governmental authorities in an effort to cope with the very great needs of agricultural, as well as of industrial workers. Activity in manufacturing, logging, mining, communications, transportation, services and trade was, on the whole, less in 1931 than in 1930. Construction work was on a higher level during most of the year, but this was wholly a result of the unemployment relief measures.

There were few outstanding features in the 1932 employment situation, all industries and areas being affected to a greater or lesser degree by the world wide dullness in business. During the year it was decided generally to adopt a policy of direct relief for the unemployed. The index of employment, deprived to a considerable extent of the stimulus of large scale public works, declined to a point decidedly lower than in any other recent year. Employment in the Prairie Provinces showed a greater falling-off from the preceding year than occurred in any of the other economic areas; nevertheless, the situation, largely owing to improved crop conditions, was generally better than in 1931, particularly for agriculturists. (Farm workers are ordinarily not represented in these statistics, but owing to the abnormal conditions of recent years, work or relief had to be found for many of these workers). Activity in manufacturing, mining, communications, transportation, services and trade was less, on the whole, during 1932 than in 1931. Construction work was at a lower level largely due to curtailment of unemployment relief works.

The employment situation in Canada during the greater part of 1933 showed an upward trend, paralleling the recovery shown in most of the leading industrial countries of the world. In the first few months of the year, activity reached its lowest level in recent years, but from April 1 the general trend was steadily upward, the gains in the last quarter being particularly interesting because contrary to the usual seasonal movement. Employment in the Prairie Provinces showed decidedly more variation than in 1932, the index ranging from 78.3 on April 1 to 98.7 at the beginning of October, as compared with a spread of under nine points between the 1932 high and low. The average for the twelve months was 86.2, or 3.8 points less than in 1932. Activity in manufacturing, logging, mining, communications, transportation, services and trade was generally less during 1933 than in 1932. Construction work, on the whole, was at practically the same level as in the preceding year. This was partly due to the influence of unemployment relief works. Logging continued at a low level, although it was slightly more active in the closing months of the year than in the same period of 1932.

Continued improvement in the employment situation characterized 1934. The average index of employment on the 1926 average = 100 rose from 83.4 in the period January 1 - December 1, 1933 to 96.0 in the same months of 1934 or by 15 p.c. The program of public works undertaken for the relief of employment continued an important factor particularly in the construction group, but other industrial divisions only indirectly affected by such stimulation also recorded important gains. In the Prairie Provinces employment showed improvement on the whole; the index at 86.4 on January 1, seasonally declined until April 1, after which an upward trend was in evidence. From the 1934 low of 83.3, the index rose to 96.5 on November 1, an increase of 15.8 p.c. The index at the beginning of November was also about two points higher than at the same date in 1933 and the decline to 94.5 on December 1, was less than the usual seasonal reduction. Activity in manufacturing, logging, communications, transportation, services and trade was greater than in 1933. Construction showed a falling-off towards the close of the year.

TABLE 2.--Index Numbers of Employment--Economic Areas and Certain Cities.
(Average calendar year 1926 = 100)

	Economic Areas					Cities				
	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia	Canada	Montreal	Toronto	Winnipeg	Vancouver
1921 - Average	102.4	82.2	90.6	94.0	81.1	88.8				
1922 - Average	97.3	81.4	92.8	92.6	82.8	89.0	86.0	96.1	93.9	81.5
1923 - Average	105.7	90.7	99.5	94.8	87.4	95.8	92.7	98.0	90.6	82.5
1924 - Average	96.6	91.3	95.5	92.1	89.4	93.4	93.0	94.3	86.5	86.2
1925 - Average	97.0	91.7	94.8	92.0	93.7	93.6	94.2	95.7	88.5	92.0
1926 - Average	99.4	99.4	99.6	99.5	100.2	99.6	99.7	99.6	99.2	99.9
1927 - Average	103.7	104.0	105.6	105.3	101.1	104.6	103.0	105.7	104.1	100.7
1928 - Average	106.6	108.3	113.5	117.9	106.4	111.6	108.2	112.1	110.1	104.3
1929 - Average	114.8	113.4	125.1	126.3	113.9	119.0	115.3	121.3	112.3	109.2
1930 - Average	118.3	110.3	114.6	117.1	107.9	113.4	111.8	116.3	107.6	109.8
1931 - Average	108.1	100.9	101.2	111.5	95.5	102.5	102.5	107.7	97.1	104.5
1932 - Average	92.2	85.5	88.7	90.0	80.5	87.5	88.1	95.2	86.6	88.5
1933 - Average	85.3	82.0	84.2	86.2	78.0	83.4	81.0	87.5	80.2	83.0

TABLE 2.—Index Numbers of Employment—Economic Areas and Certain Cities - Cont'd.
(Average calendar year 1926 = 100)

	Economic Areas						Cities			
	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia	Canada	Montreal	Toronto	Winnipeg	Vancouver
1931 - Jan. 1	119.3	99.3	100.1	106.4	94.1	101.7	102.4	107.5	98.2	107.0
Feb. 1	110.6	98.8	101.7	101.0	93.8	100.7	102.8	107.1	96.8	108.4
Mar. 1	104.5	99.7	101.6	98.6	93.8	100.2	105.1	107.5	98.0	108.2
Apr. 1	102.3	98.5	102.4	97.7	92.4	99.7	106.2	109.5	97.3	101.9
May 1	104.0	102.3	103.8	100.0	96.1	102.2	107.0	111.4	97.1	104.6
June 1	105.2	104.3	104.2	103.3	97.9	103.6	107.1	110.3	98.8	106.9
July 1	109.4	103.2	102.7	108.9	97.9	103.8	105.1	109.0	99.9	106.0
Aug. 1	106.8	102.4	100.7	129.1	98.0	105.2	102.5	106.3	98.1	106.0
Sept. 1	102.7	109.8	100.7	130.0	96.6	107.1	102.3	106.6	98.2	104.5
Oct. 1	102.6	101.6	99.3	129.1	95.9	103.9	97.3	107.3	96.4	99.7
Nov. 1	116.6	96.2	98.1	128.2	98.9	103.0	95.4	105.6	93.5	101.9
Dec. 1	112.7	94.7	99.3	106.0	90.5	99.1	96.7	104.8	93.2	98.3
1932 - Jan. 1	111.1	86.3	93.8	92.8	80.6	91.6	88.0	99.6	92.5	91.1
Feb. 1	99.9	85.9	92.7	91.3	77.5	89.7	87.4	97.8	89.6	90.1
Mar. 1	93.1	86.5	91.8	88.2	78.7	88.7	89.8	97.8	88.5	87.8
Apr. 1	88.3	85.0	91.1	86.1	80.9	87.5	91.2	97.8	86.8	87.8
May 1	87.8	86.0	89.5	87.6	82.7	87.5	91.1	97.5	86.1	87.6
June 1	96.4	87.8	89.9	89.3	83.7	89.1	91.7	96.8	85.2	89.4
July 1	96.4	86.6	89.2	90.5	83.7	88.7	88.6	94.6	87.0	88.7
Aug. 1	90.1	84.4	86.9	90.1	81.4	86.3	85.5	92.3	86.0	87.9
Sept. 1	87.8	85.3	85.1	91.6	82.8	86.0	86.3	91.6	85.1	89.0
Oct. 1	84.9	85.8	86.1	94.6	82.1	86.7	88.0	93.5	85.6	88.5
Nov. 1	84.8	83.6	84.2	91.6	77.8	84.7	84.8	92.5	84.3	87.9
Dec. 1	83.8	82.9	84.1	86.7	73.8	83.2	85.1	91.2	82.2	85.8
1933 - Jan. 1	80.1	77.8	78.8	84.4	69.7	78.5	77.5	86.5	80.0	82.5
Feb. 1	76.5	75.7	78.9	80.4	68.0	77.0	76.1	84.7	77.8	81.2
Mar. 1	76.8	74.1	79.8	80.0	67.7	76.9	75.8	84.4	78.0	80.5
Apr. 1	78.3	73.1	78.3	78.3	68.8	76.0	76.4	85.0	78.0	79.0
May 1	80.3	75.4	79.5	79.2	72.2	77.6	79.5	85.6	77.0	79.2
June 1	82.8	79.3	81.6	82.7	76.2	80.7	80.6	86.5	79.4	81.9
July 1	89.9	83.0	85.0	85.0	81.8	84.5	81.5	87.7	80.3	83.4
Aug. 1	93.0	84.8	86.6	90.5	87.3	87.1	82.4	86.9	81.7	85.2
Sept. 1	91.5	87.0	88.1	90.7	89.2	88.5	84.4	88.4	82.2	87.4
Oct. 1	90.9	89.1	89.6	98.7	85.6	90.4	87.3	90.9	82.3	85.9
Nov. 1	90.2	92.2	91.4	94.6	84.0	91.3	86.4	91.5	81.5	85.1
Dec. 1	93.4	92.4	93.3	89.3	85.4	91.8	84.5	92.0	83.3	84.9
1934 - Jan. 1	97.0	86.3	91.2	86.4	80.4	88.6	78.0	90.0	81.1	82.2
Feb. 1	101.3	88.5	95.3	84.7	84.1	91.4	81.1	89.7	79.5	83.9
Mar. 1	103.2	89.1	97.8	83.8	85.6	92.7	82.6	91.1	79.7	84.1
Apr. 1	95.1	85.1	98.7	83.3	86.6	91.3	82.1	92.7	79.7	84.8
May 1	98.3	85.5	98.5	85.4	88.4	92.0	82.9	92.9	81.2	85.9
June 1	98.4	90.9	104.4	89.5	89.1	96.6	86.3	93.9	81.9	86.3
July 1	100.4	94.1	109.9	94.1	94.1	101.0	86.7	94.1	82.7	89.8
Aug. 1	101.3	94.9	106.0	93.0	97.6	99.9	86.4	92.9	84.0	91.5
Sept. 1	101.8	95.4	103.3	92.9	96.2	98.8	86.6	94.3	85.2	91.8
Oct. 1	103.1	96.0	104.8	95.7	95.4	100.0	87.0	96.5	86.5	90.5
Nov. 1	104.9	98.0	103.6	96.5	94.1	100.2	87.3	97.2	86.4	89.0
Dec. 1	106.9	96.4	101.9	94.3	92.9	98.9	86.7	97.1	87.1	89.0

Relative Weight of Employment as at December 1, 1934.

8.2 28.5 42.2 12.8 8.3 100.0 13.9 12.7 4.0 3.0

Notes: The "Relative Weights" as given above show the proportion of employees in the indicated areas and cities to the total number of all employees reported in Canada by the firms making returns for the date mentioned.

TABLE 3.--Index Numbers of Employment in the Prairie Provinces and Canada, by Industries, 1927-34.
1926 = 100

	January 1		April 1		July 1		October 1	
	Prairie Provinces	Canada	Prairie Provinces	Canada	Prairie Provinces	Canada	Prairie Provinces	Canada
1927								
Manufacturing	99.8	94.7	100.6	101.5	105.9	106.8	107.1	106.4
Logging	249.7	136.1	139.2	85.7	23.8	69.9	18.5	96.8
Mining	116.2	104.7	100.1	103.0	96.2	106.6	111.1	111.5
Communications	96.0	99.6	96.0	101.9	103.9	106.0	109.9	107.2
Transportation	105.2	99.1	97.3	96.2	66.0	107.0	107.6	106.5
Construction and Maintenance	71.8	73.1	60.8	72.5	136.9	144.2	132.2	139.8
Services	92.3	96.7	95.9	99.0	138.2	113.1	125.1	115.3
Trade	109.5	109.9	106.7	102.3	107.8	106.0	110.3	109.4
All Industries	99.9	95.9	94.1	97.4	110.7	109.7	111.7	110.3
1928								
Manufacturing	104.2	97.9	108.5	106.6	118.7	113.1	124.6	115.7
Logging	245.1	163.2	111.5	88.3	24.5	69.5	28.3	98.5
Mining	136.0	112.6	106.6	109.0	103.9	113.1	116.2	117.1
Communications	99.9	102.9	97.5	102.3	113.1	108.7	121.9	115.1
Transportation	111.1	99.4	100.0	98.2	115.5	109.2	122.3	111.8
Construction and Maintenance	77.1	78.6	81.6	78.6	198.6	154.3	165.2	147.3
Services	101.4	105.3	110.3	108.4	167.0	130.8	155.2	127.7
Trade	125.3	120.4	111.1	111.1	116.7	115.3	123.7	120.4
All Industries	107.5	100.7	101.9	102.3	129.8	117.7	126.4	118.8
1929								
Manufacturing	118.6	107.3	121.5	116.5	125.9	120.3	123.3	120.2
Logging	234.9	171.0	170.5	83.1	41.8	80.1	29.5	117.1
Mining	133.2	116.2	107.9	112.9	104.9	119.5	130.7	126.6
Communications	115.7	112.6	105.7	113.5	125.4	123.8	131.9	128.1
Transportation	112.1	102.6	106.2	101.8	124.8	117.5	128.2	114.3
Construction and Maintenance	94.8	87.4	101.1	85.4	198.8	164.5	173.9	162.4
Services	121.5	118.0	124.6	121.1	175.2	145.4	157.0	141.0
Trade	127.0	128.5	122.1	122.5	123.9	127.7	123.9	128.2
All Industries	116.6	109.1	113.9	110.4	136.7	124.7	134.2	125.6
1930								
Manufacturing	109.6	106.5	113.1	111.3	117.8	111.3	114.1	107.8
Logging	195.6	200.2	114.8	87.6	33.6	82.1	24.9	70.8
Mining	128.3	122.5	95.9	114.5	92.3	113.8	120.4	118.9
Communications	134.5	128.2	109.2	117.1	123.9	119.7	133.1	119.5
Transportation	111.2	101.9	100.8	99.5	110.3	108.0	119.4	110.1
Construction and Maintenance	76.7	92.7	71.8	86.4	144.0	170.1	182.7	163.0
Services	118.3	123.5	118.3	126.1	159.4	142.7	146.7	136.7
Trade	132.5	133.8	120.7	123.1	122.9	129.5	122.3	127.9
All Industries	111.0	111.2	103.2	107.8	120.4	118.9	130.0	116.2
1931								
Manufacturing	102.1	93.7	102.8	99.7	100.9	97.2	89.4	91.8
Logging	82.9	107.6	80.3	42.9	14.2	38.5	7.2	42.2
Mining	131.7	114.4	103.2	108.1	86.6	104.1	110.5	108.2
Communications	122.4	110.6	102.9	103.3	109.0	104.8	112.6	104.2
Transportation	105.6	95.9	97.3	94.3	98.6	97.7	100.8	95.2
Construction and Maintenance	90.2	110.7	75.0	96.8	141.0	137.1	261.0	164.5
Services	110.1	123.2	105.7	122.0	133.7	130.8	122.5	125.5
Trade	121.5	132.9	111.7	123.1	111.1	124.0	107.2	120.8
All Industries	106.4	101.7	97.7	99.7	108.9	103.8	129.1	103.9

TABLE 3.--Index Numbers of Employment in the Prairie Provinces and Canada, by Industries, 1927-34 - Cont'd.
1926 = 100

	January 1		April 1		July 1		October 1	
	Prairie Provinces	Canada	Prairie Provinces	Canada	Prairie Provinces	Canada	Prairie Provinces	Canada
<u>1932</u>								
Manufacturing	92.8	83.9	92.8	87.3	90.5	85.4	90.4	84.1
Logging	36.8	68.7	47.9	31.1	13.7	34.2	11.4	28.4
Mining	114.7	105.1	102.2	101.0	80.4	95.0	111.3	98.2
Communications	101.5	98.1	94.7	93.9	96.9	93.1	98.2	91.2
Transportation	90.1	85.6	84.0	81.9	85.2	85.9	96.2	87.2
Construction and Maintenance	74.7	104.8	58.5	79.9	88.9	93.3	89.1	84.3
Services	98.3	114.4	97.5	113.9	117.9	119.9	97.3	109.8
Trade	109.8	125.7	101.1	114.3	103.6	115.4	104.7	114.5
All Industries	92.8	91.6	86.1	87.5	90.5	88.7	94.6	86.7
<u>1933</u>								
Manufacturing	81.4	74.4	81.4	76.0	85.7	83.0	86.9	86.7
Logging	28.7	74.5	34.1	35.6	16.3	49.5	11.2	64.7
Mining	117.7	96.9	90.9	91.4	80.5	93.1	110.8	105.8
Communications	98.1	87.5	85.8	84.5	88.9	84.0	91.6	82.5
Transportation	85.8	78.3	81.2	74.2	83.6	80.5	87.2	82.7
Construction and Maintenance	58.0	58.5	50.1	54.7	75.1	78.2	130.2	97.0
Services	88.8	102.2	86.8	102.5	103.7	111.5	91.9	108.1
Trade	105.9	119.6	96.8	107.6	100.0	111.8	102.6	115.0
All Industries	84.4	78.5	78.3	76.0	85.0	84.5	98.7	90.4
<u>1934</u>								
Manufacturing	83.4	80.0	84.3	88.1	89.6	93.8	90.9	94.4
Logging	77.3	168.8	113.2	104.9	43.2	86.3	47.2	113.4
Mining	122.1	106.8	94.4	103.3	83.0	107.0	114.4	117.9
Communications	86.5	78.4	82.0	76.8	87.3	80.1	96.7	81.3
Transportation	81.7	76.3	81.3	75.9	86.0	82.6	90.6	84.8
Construction and Maintenance	65.0	88.1	61.9	95.8	110.0	140.6	95.8	117.0
Services	90.9	109.8	88.1	111.8	106.0	119.7	93.5	116.2
Trade	107.3	122.3	101.0	116.1	102.3	119.1	107.0	120.0
All Industries	86.4	88.6	83.3	91.3	94.1	101.0	95.7	100.0

PART 2.--AGRICULTURE

Introduction:— Farming in the Prairie Provinces comprises four more or less distinct types: first, wheat growing; second, mixed farming; third dairying (usually associated with mixed farming); and fourth, ranching. Wheat growing predominates in southwestern and central Alberta, throughout the whole of Saskatchewan except the northern and eastern fringe and the dry belt and in southern Manitoba, although in the latter area, the proportion of other cereals and forage crops is growing rapidly. Mixed farming is found in northern and western Alberta and in the northern and eastern parts of both Saskatchewan and Manitoba — in other words over practically the whole of the park belt. It is also the dominant type of farming in the irrigated districts. The greatest development in dairying has occurred in eastern Manitoba, northeastern Saskatchewan and northwestern Alberta. Ranching is practically confined to the dry area in southwestern Saskatchewan and southeastern Alberta and to a strip of land extending from the international boundary northward along the foothills to beyond Calgary.

During the years 1901-31 the area of occupied farm land in the prairie region increased from 15,000,000 to 110,000,000 acres or more than sevenfold. In 1901 the Prairie Provinces contained 24.3 p.c. of the total occupied farm acreage in the Dominion; in 1931, 67.3 p.c. In the same period the improved farm acreage increased from 18.5 to 69.8 p.c. and the field crop acreage from 18.2 p.c. to 69.1 p.c.

The decade 1901-11 witnessed the greatest expansion, due to the rush of homesteaders into Saskatchewan and Alberta. Occupied farm land increased from 15,000,000 to over 57,000,000 acres. By 1921 a total of nearly 88,000,000 acres in occupied farm land was reached, the natural expansion being accelerated to a great extent by the war. There was a considerable slowing down in the rate of expansion between 1921 and 1926, the occupied farm land in the latter year amounting to approximately 89,000,000 acres. Thereafter, a period of more rapid expansion ensued, the occupied farm land reaching a total of approximately 110,000,000 acres in 1931. The bringing of occupied acreage under cultivation proceeded rapidly. Despite the rapid influx of settlers, in every intercensal period but one since the opening of the century improved acreage increased faster than occupied, and in that one (1926-31) fell behind but slightly. Of the improved land in the Prairie Provinces in 1931, 67 p.c. was in field crops.

A summary of the growth of population and agriculture in the Prairie Provinces 1901-31 with comparative figures for Canada according to the decennial and quinquennial censuses is shown in table 1.

TABLE 1.--Population, Number and Area of Farms, and Acreage under Crops in the Prairie Provinces, 1901-31.

	1901	1906	1911	1916	1921	1926	1931
<u>Manitoba</u>							
Population, total	255,211	365,688	461,394	553,860	610,118	639,056	700,139
urban	70,436	138,090	200,365	241,014	261,616	278,858	315,969
rural	184,775	227,598	261,029	312,846	348,502	360,198	384,170
No. employed in agriculture	47,354	1/	69,936	1/	86,908	1/	93,261
No. of farms	32,252	36,141	43,631	46,580	53,252	53,251	54,199
Area of occupied farms	ac. 8,843,347	1/	12,184,304 ^{2/}	13,436,670	14,615,844 ^{2/}	14,411,597 ^{2/}	15,131,685 ^{3/}
Average area per farm	" 274.2	1/	279.3	288.5	274.5	270.6	279.2
Area improved	" 3,995,305	1/	6,746,169 ^{2/}	7,187,737	8,057,823 ^{2/}	8,346,021 ^{2/}	8,521,930 ^{2/}
Average area improved per farm	" 123.9	1/	154.6	154.3	151.3	156.7	157.2
Area under field crops	" 2,756,106	4,220,161	5,161,858	5,116,661	5,857,635	6,261,417	5,842,368
<u>Saskatchewan</u>							
Population, total	91,279	257,763	492,432	647,835	757,510	820,738	921,785
urban	14,266	48,462	131,395	176,297	218,958	242,532	290,905
rural	77,013	209,301	361,037	471,538	538,552	578,206	630,880
No. employed in agriculture	1/	1/	133,008	1/	174,486	1/	204,422
No. of farms	13,445	55,971	95,013	104,006	119,451	117,781	136,472
Area of occupied farms	ac. 3,833,434	1/	28,099,207 ^{2/}	36,800,698	44,022,907 ^{2/}	45,945,410 ^{2/}	55,673,460 ^{3/}
Average area per farm	" 285.1	1/	295.7	353.8	368.5	390.1	407.9
Area improved	" 1,122,602	1/	11,871,907 ^{2/}	19,632,206	25,037,401 ^{2/}	27,714,490 ^{2/}	33,548,988 ^{2/}
Average area improved per farm	" 83.5	1/	125.0	188.8	209.6	235.3	245.8
Area under field crops	" 655,537	3,271,436	9,136,868	13,973,382	17,822,481	19,558,964	22,126,329

1/ Not available.

2/ Area includes improved acreage of Indian Reserves.

3/ Area includes acreage of Indian Reserves.

TABLE 1.—Population, Number and Area of Farms, and Acreage under Crops in the Prairie Provinces 1901-1931 - Cont'd.

Items	1901	1906	1911	1916	1921	1926	1931
Alberta							
Population, total	73,022	185,412	374,295	496,525	588,454	607,599	731,605
urban	18,533	58,033	137,662	188,749	222,904	233,848	278,508
rural	54,489	127,379	236,633	307,776	365,550	373,751	453,097
No. employed in agriculture	1/	1/	80,528	1/	114,202	1/	145,664
No. of farms	9,479	30,286	60,559	67,977	82,954	77,130	97,408
Area of occupied farms	ac. 2,735,630	1/	17,359,333 ^{2/}	23,062,767	29,293,053 ^{2/}	28,572,987 ^{2/}	38,977,457 ^{3/}
Average area per farm	" 288.6	1/	286.7	339.3	353.1	370.5	400.1
Area improved	" 474,694	1/	4,351,698 ^{2/}	7,510,303	11,768,042 ^{2/}	13,204,114 ^{2/}	17,748,518 ^{2/}
Average area improved per farm	" 50.1	1/	71.9	110.5	141.9	171.2	192.2
Area under field crops	" 188,476	916,100	3,378,365	5,505,972	8,523,190	9,166,700	12,037,394
The Prairie Provinces							
Population, total	419,512	808,863	1,328,121	1,698,220	1,956,082	2,067,393	2,353,529
urban	103,235	244,585	469,422	606,060	703,478	755,238	885,382
rural	316,277	564,278	858,699	1,092,160	1,252,604	1,312,155	1,468,147
No. employed in agriculture	1/	1/	283,472	1/	375,596	1/	443,347
No. of farms	55,176	122,398	199,203	218,563	255,657	248,162	288,079
Area of occupied farms	ac. 15,412,411	1/	57,642,844 ^{2/}	73,300,135	87,931,804 ^{2/}	88,929,994 ^{2/}	109,782,602 ^{3/}
Average area per farm	" 279.3	1/	289.4	335.4	343.9	358.4	381.1
Area improved	" 5,592,601	1/	22,969,774 ^{2/}	34,330,246	44,863,266 ^{2/}	49,264,625 ^{2/}	59,819,436 ^{2/}
Average area improved per farm	" 101.4	1/	115.3	157.1	175.5	198.5	207.6
Area under field crops	" 3,600,119	8,407,697	17,677,091	24,595,915	32,203,306	34,987,081	40,006,091
Canada^{4/}							
Population, total	5,323,967	-	7,191,624	-	8,775,319	-	10,362,833
urban	2,005,080	-	3,269,082	-	4,350,816	-	5,570,698
rural	3,318,887	-	3,922,542	-	4,424,503	-	4,792,135
No. employed in agriculture	716,860	-	933,735	-	1,041,618	-	1,128,188
No. of farms	511,073	-	682,329	-	711,090	-	728,623
Area of occupied farms	ac. 63,422,338	-	108,968,715 ^{2/}	-	140,887,903 ^{2/}	-	163,114,034
Average area per farm	" 124.1	-	159.7	-	198.1	-	223.9
Area improved	" 30,166,033	-	48,733,823 ^{2/}	-	70,769,548 ^{2/}	-	85,732,172
Average area improved per farm	" 59.02	-	71.42	-	99.52	-	117.66
Area under field crops	" 19,763,740	-	35,261,338	-	49,680,918	-	57,925,483

Agricultural Wealth and Revenue

The estimated gross agricultural wealth of the Prairie Provinces in 1933 was \$2,343,199,000 as compared with \$5,232,512,000 for Canada as a whole. These figures show a decline of approximately 14½ million dollars from the preceding year and a decline of around a billion dollars from the 1928 level in the case of the Prairie Provinces and an increase of approximately 22½ million dollars over 1932 and a decline of around 2½ billion dollars from 1928 in the case of Canada. For further details see table 2.

1/ Not available.

2/ Area includes improved acreage of Indian Reserves.

3/ Area includes acreage of Indian Reserves.

4/ Nine provinces.

TABLE 2.--Estimated Gross Agricultural Wealth, Prairie Provinces and Canada, 1931-33.
"000" omitted

		Lands	Buildings	Implements and Machinery	Live Stock	Poultry	Animals on Fur Farms	Agricultural Production	Total
		\$	\$	\$	\$	\$	\$	\$	\$
Manitoba		150,162	88,389	54,847	32,693	2,363	547	53,987	382,988
Saskatchewan		573,854	223,795	185,510	69,744	4,154	376	106,417	1,163,850
Alberta		367,088	137,332	116,301	60,991	3,080	864	110,705	796,361
Prairie Provinces - 1933		1,091,104	449,516	356,658	163,428	9,597	1,787	271,109	2,343,199
	1932	1,094,212	449,516	356,658	146,913	9,757	1,662	299,080	2,357,798
	1931	1,499,712	449,516	356,658	177,470	14,377	2,127	291,666	2,791,526
Canada	- 1933	2,032,769	1,342,924	650,664	403,135	33,456	7,262	762,302	5,232,512
	1932	2,032,769	1,342,924	650,664	375,722	34,138	6,749	766,794	5,209,760
	1931	2,710,358	1,342,924	650,664	465,271	43,138	8,482	836,114	6,056,951

A general review of agricultural production and the revenue therefrom in the Prairie Provinces during recent years is shown in table 3.

TABLE 3.--Agricultural Production, 1922-33.
"000" omitted

	1922	1923	1924	1925	1926	1927
	\$	\$	\$	\$	\$	\$
Manitoba						
Field crops	98,078	62,717	136,025	93,191	111,937	82,280
Farm animals	7,961	7,597	10,327	11,324	10,556	13,044
Wool	82	73	106	108	114	129
Dairy products	12,593	13,647	11,042	15,538	15,924	17,781
Fruits and vegetables	1,900	1,702	1,240	1,700	1,542	1,609
Poultry and eggs	4,132	3,423	3,967	4,712	5,645	7,210
Fur farming	35	86	174	317	118	367
Clover and grass seed	61	61	78	44	29	195
Honey	-	-	195	616	528	960
TOTAL	124,842	89,306	163,154	127,550	146,393	123,575
Saskatchewan						
Field crops	296,227	261,128	237,310	368,275	309,128	348,005
Farm animals	17,130	16,342	19,631	22,221	20,743	21,956
Wool	184	142	163	158	176	187
Dairy products	18,443	20,003	17,566	25,504	20,598	24,449
Fruits and vegetables	1,400	2,461	2,109	2,500	2,452	2,701
Poultry and eggs	9,515	9,477	9,083	9,334	11,778	12,498
Fur farming	7	5	14	32	58	87
Clover and grass seed	103	103	130	54	54	305
Honey	-	-	18	37	38	105
TOTAL	343,009	309,661	286,024	428,115	365,025	410,293
Alberta						
Field crops	94,947	151,040	159,760	157,227	202,149	272,743
Farm animals	18,916	16,462	23,303	27,929	23,529	27,952
Wool	231	264	272	317	593	633
Dairy products	14,794	16,031	12,584	20,136	16,488	16,521
Fruits and vegetables	1,500	1,860	1,330	1,840	1,768	1,770
Poultry and eggs	6,576	6,802	6,843	7,546	8,742	10,093
Fur farming	46	62	145	241	197	216
Clover and grass seed	58	58	115	121	90	130
Honey	-	-	13	23	37	60
TOTAL	137,068	192,579	204,365	215,400	253,593	330,118

TABLE 3.--Agricultural Production, 1922-33 - Cont'd.
"000" omitted

	1 9 2 2	1 9 2 3	1 9 2 4	1 9 2 5	1 9 2 6	1 9 2 7
	\$	\$	\$	\$	\$	\$
<u>Canada</u>						
Field crops	962,293	899,226	995,236	1,098,304	1,104,983	1,173,133
Farm animals	140,484	125,442	148,324	177,031	178,383	183,927
Wool	3,180	3,160	3,771	3,958	4,140	4,166
Dairy products	215,576	233,683	217,974	284,863	277,305	294,874
Fruits and vegetables	55,855	58,216	44,848	48,897	43,075	46,027
Poultry and eggs	62,850	62,370	65,084	74,267	83,569	97,931
Fur farming	1,538	2,175	3,218	3,679	3,520	4,798
Maple products	5,576	4,769	5,991	5,288	4,896	4,935
Tobacco	4,548	3,518	4,359	7,004	7,380	9,112
Flax fibre	105	166	712	454	208	321
Clover and grass seed	4,360	4,360	3,300	3,598	5,097	3,841
Honey	-	-	2,013	2,472	1,921	2,937
T O T A L	1,456,365	1,397,085	1,494,830	1,709,815	1,714,477	1,825,950

	1 9 2 8	1 9 2 9	1 9 3 0	1 9 3 1	1 9 3 2	1 9 3 3
	\$	\$	\$	\$	\$	\$
<u>Manitoba</u>						
Field crops	113,492	78,919	52,975	24,847	31,937	35,653
Farm animals	14,172	14,367	11,846	6,911	4,468	6,308
Wool	163	162	120	60	28	84
Dairy products	17,597	14,404	12,974	11,198	8,751	10,796
Fruits and vegetables	1,567	1,464	1,644	1,281	986	876
Poultry and eggs	7,272	8,920	7,998	4,600	3,395	2,207
Fur farming	335	374	263	195	166	179
Clover and grass seed	103	40	184	87	50	45
Honey	751	822	910	516	412	304
T O T A L	155,452	119,472	89,914	49,695	50,193	56,452

	1 9 2 8	1 9 2 9	1 9 3 0	1 9 3 1	1 9 3 2	1 9 3 3
	\$	\$	\$	\$	\$	\$
<u>Saskatchewan</u>						
Field crops	348,586	235,248	135,695	70,347	98,217	82,708
Farm animals	23,390	25,150	20,744	12,490	8,984	12,711
Wool	237	226	108	80	74	206
Dairy products	21,331	23,125	16,856	13,665	11,186	12,313
Fruits and vegetables	2,737	1,850	2,584	2,053	1,674	1,371
Poultry and eggs	12,934	13,454	10,121	6,164	4,841	3,765
Fur farming	108	127	152	154	121	130
Clover and grass seed	260	50	85	10	62	54
Honey	78	74	108	73	46	100
T O T A L	409,661	299,304	186,453	105,036	125,205	113,358

	1 9 2 8	1 9 2 9	1 9 3 0	1 9 3 1	1 9 3 2	1 9 3 3
	\$	\$	\$	\$	\$	\$
<u>Alberta</u>						
Field crops	220,786	157,254	110,284	98,916	95,913	86,499
Farm animals	29,322	32,271	24,422	14,584	10,255	16,939
Wool	794	519	250	228	195	359
Dairy products	14,980	18,928	18,049	15,764	11,859	12,724
Fruits and vegetables	1,858	1,800	2,173	1,741	1,426	1,203
Poultry and eggs	9,867	11,880	10,147	5,229	3,613	2,648
Fur farming	289	340	303	298	300	323
Clover and grass seed	77	176	171	83	77	55
Honey	67	78	99	92	44	90
T O T A L	278,040	223,246	165,898	136,935	123,682	120,840

TABLE 3.--Agricultural Production, 1922-33 - Cont'd.
"000" omitted

	1 9 2 8	1 9 2 9	1 9 3 0	1 9 3 1	1 9 3 2	1 9 3 3
	\$	\$	\$	\$	\$	\$
Canada						
Field crops	1,125,003	948,981	662,041	435,966	452,527	453,598
Farm animals	197,880	207,317	166,630	96,778	65,185	89,063
Wool	5,099	4,470	2,311	1,644	1,093	2,000
Dairy products	297,625	291,713	237,068	191,390	159,074	167,488
Fruits and vegetables	48,756	46,398	49,417	39,692	32,157	31,700
Poultry and eggs	106,653	107,664	95,227	56,298	42,078	35,880
Fur farming	6,106	6,791	4,925	3,557	3,284	3,535
Maple products	5,583	6,119	5,251	3,456	2,706	2,059
Tobacco	6,834	6,276	7,058	7,178	6,088	5,201
Flax fibre	509	393	371	179	170	159
Clover and grass seed	2,957	2,123	2,482	1,497	962	1,362
Honey	3,015	2,806	2,584	2,246	1,470	1,707
T O T A L	1,806,020	1,631,081	1,235,365	839,881	766,794	793,752

A more detailed presentation of agricultural production in the Prairie Provinces with the leading historical data in each case is presented in the following section under the headings "Field Crops", "Live Stock", etc.

A.--Field Crops

Over two-thirds of the field-crop acreage of Canada is concentrated in the three Prairie Provinces and most of this area is seeded to the grain crops with wheat predominant.

The areas of the principal field crops according to the decennial censuses of the Dominion and the quinquennial censuses of the Prairie Provinces since 1900, and according to the data compiled annually by the Bureau of Statistics for more recent years are shown in table 4. The yield of the principal crops and the value of such for the above years are shown in tables 5 and 6.

TABLE 4.--Area of Principal Field Crops, Prairie Provinces and Canada, 1900-34.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		Acres	Acres	Acres	Acres	Acres
Field Crops	1900	2,756	656	188	3,600	19,764
	1905	3,617	2,105	617	6,339	-
	1910	4,668	6,872	2,068	13,608	30,556
	1915	4,973	13,274	4,739	22,986	-
	1920	5,436	16,781	8,018	30,235	47,553
	1925	5,941	18,758	8,517	33,216	-
	1928	6,744	21,064	11,728	39,536	59,352
	1929	6,687	22,420	12,433	41,540	61,207
	1930	5,921	22,514	11,915	40,350	57,951
	1931	5,842	22,126	12,037	40,005	57,925
	1932	5,867	22,334	14,029	42,230	59,643
	1933	5,964	21,306	13,900	41,170	58,533
	1934	6,001	19,772	12,929	38,702	56,040
Wheat	1900	1,965	487	43	2,495	4,225
	1905	2,417	1,376	148	3,941	-
	1910	2,759	4,228	880	7,867	8,865
	1915	2,800	8,929	2,138	13,867	-
	1920	2,507	10,169	4,079	16,775	17,836
	1925	1,903	12,509	5,348	19,760	-
	1928	2,660	13,791	6,708	23,159	24,119
	1929	2,301	14,445	7,551	24,297	25,255
	1930	2,150	14,714	7,943	24,807	25,565
	1931	2,617	15,026	7,943	25,586	26,355
	1932	2,651	15,543	8,201	26,395	27,182
	1933	2,536	14,743	7,898	25,177	25,991
	1934	2,533	13,262	7,501	23,296	23,985

TABLE 4.—Area of Principal Field Crops, Prairie Provinces and Canada, 1900-34 - Cont'd.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		Acres	Acres	Acres	Acres	Acres
Oats	- 1900	574	142	118	834	5,368
	1905	779	606	312	1,697	-
	1910	1,209	1,888	783	3,880	8,656
	1915	1,317	3,336	1,827	6,480	-
	1920	1,670	4,676	2,720	9,066	13,879
	1925	1,623	3,752	1,900	7,275	-
	1928	1,458	4,359	2,340	8,157	13,137
	1929	1,558	4,256	1,918	7,732	12,479
	1930	1,341	3,793	2,163	7,297	11,648
	1931	1,518	4,295	2,466	8,279	12,838
	1932	1,464	4,365	2,705	8,534	13,148
	1933	1,504	4,571	2,870	8,945	13,529
	1934	1,458	4,625	3,032	9,115	13,731
Barley	- 1900	140	12	11	163	872
	1905	249	41	81	371	-
	1910	416	130	121	667	1,283
	1915	567	300	304	1,171	-
	1920	749	399	365	1,513	2,044
	1925	1,645	858	437	2,940	-
	1928	1,937	1,621	546	4,104	4,831
	1929	2,182	2,229	704	5,115	5,926
	1930	1,784	1,836	698	4,318	4,926
	1931	1,129	1,375	710	3,214	3,791
	1932	1,123	1,330	701	3,154	3,758
	1933	1,173	1,228	631	3,032	3,658
	1934	1,125	1,088	749	2,962	3,613
Rye	- 1900	1	1	1	3	177
	1905	3	1	4	8	-
	1910	3	1	7	11	115
	1915	12	7	16	35	-
	1920	121	118	125	369	485
	1925	253	191	79	523	-
	1928	120	471	163	754	840
	1929	85	642	196	923	992
	1930	86	815	191	1,092	1,147
	1931	50	528	154	732	799
	1932	41	483	183	707	774
	1933	46	305	169	520	583
	1934	87	347	235	669	735
Flax	- 1900	14	-	-	14	23
	1905	9	36	1	46	-
	1910	35	506	31	572	582
	1915	15	396	48	459	-
	1920	130	917	108	1,155	1,165
	1925	119	692	18	829	-
	1928	82	279	6	367	378
	1929	62	298	13	373	382
	1930	95	526	35	656	662
	1931	101	509	31	641	648
	1932	49	381	23	453	462
	1933	20	205	11	236	244
	1934	26	175	18	219	227

TABLE 4.—Area of Principal Field Crops, Prairie Provinces and Canada, 1900-34 - Cont'd.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		Acres	Acres	Acres	Acres	Acres
Mixed Grains	1900	1	-	-	1	273
	1905	-	-	-	-	-
	1910	1	1	2	4	427
	1915	1	2	2	5	-
	1920	2	7	3	12	607
	1925	10	16	6	32	-
	1928	10	22	14	46	1,107
	1929	12	23	15	50	1,119
	1930	7	11	8	26	1,135
	1931	12	18	16	46	1,196
	1932	17	21	25	63	1,184
	1933	32	23	21	76	1,167
	1934	24	21	21	66	1,159
Hay (cultivated)	1900	-	-	-	-	-
	1905	138	9	40	187	6,543
	1910	81	38	150	269	8,289
	1915	87	25	187	299	-
	1920	57	16	195	268	8,541
	1925	74	9	79	162	-
	1928	400	448	300	1,148	10,321
	1929	421	460	344	1,225	10,560
	1930	265	195	239	699	9,108
	1931	285	167	240	692	9,114
	1932	448	150	231	829	8,812
	1933	544	163	282	989	8,876
	1934	585	158	282	1,025	8,881

TABLE 5.—Yield of Principal Crops, Prairie Provinces and Canada, 1900-34.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		Bush.	Bush.	Bush.	Bush.	Bush.
Wheat	1900	18,353	4,304	798	23,455	55,572
	1905	47,627	31,799	3,036	82,462	-
	1910	34,127	66,979	9,060	110,166	132,078
	1915	69,337	224,312	66,538	360,187	-
	1920	33,442	115,519	58,196	207,157	226,508
	1925	33,624	235,472	97,962	367,058	-
	1928	52,383	321,215	171,000	544,598	566,726
	1929	28,565	160,565	92,534	281,664	304,520
	1930	43,600	206,700	147,000	397,300	420,672
	1931	28,112	132,466	140,603	301,181	321,325
	1932	44,041	211,551	167,355	422,947	443,061
	1933	32,666	128,004	102,334	263,004	281,892
	1934	37,100	114,200	112,500	263,800	275,849
Oats	1900	10,592	2,275	3,787	16,654	151,497
	1905	31,459	25,624	11,728	68,811	-
	1910	30,347	58,923	16,894	106,164	245,393
	1915	50,750	145,066	83,876	279,692	-
	1920	39,634	93,954	83,363	216,951	364,989
	1925	50,107	102,297	58,762	211,166	-
	1928	53,376	156,043	88,257	297,676	452,153
	1929	30,740	68,944	41,936	141,620	282,838
	1930	50,562	125,509	77,940	254,011	423,148
	1931	25,500	67,700	90,500	183,700	328,278
	1932	36,826	107,400	101,500	245,726	391,561
	1933	29,500	75,422	72,500	177,422	307,478
	1934	26,752	64,288	81,000	172,040	321,120

TABLE 5.--Yield of Principal Crops, Prairie Provinces and Canada, 1900-34 - Cont'd.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		Bush.	Bush.	Bush.	Bush.	Bush.
Barley	- 1900	2,667	188	287	3,142	22,224
	1905	7,544	1,196	2,231	10,971	-
	1910	6,517	3,061	2,480	12,058	28,848
	1915	16,658	9,523	9,822	26,003	-
	1920	12,869	6,605	8,831	28,305	42,956
	1925	39,213	18,105	11,273	68,591	-
	1928	52,569	44,266	15,849	112,684	136,391
	1929	36,518	30,755	12,514	79,787	102,313
	1930	49,974	40,522	18,999	109,495	135,160
	1931	15,400	14,340	20,800	50,540	67,383
	1932	20,014	23,400	19,700	63,114	80,773
	1933	16,900	17,560	12,783	47,243	63,359
	1934	17,298	12,403	15,041	44,742	63,742
Rye	- 1900	7	13	18	38	2,317
	1905	59	20	85	164	-
	1910	29	12	109	150	1,542
	1915	208	203	375	786	-
	1920	1,389	1,223	1,922	4,534	6,216
	1925	3,288	2,850	877	7,015	-
	1928	2,066	8,412	2,680	13,158	14,618
	1929	1,309	8,301	2,372	11,982	13,161
	1930	2,052	14,875	3,714	20,641	22,019
	1931	661	2,396	1,100	4,157	5,322
	1932	560	5,190	1,520	7,270	8,470
	1933	575	1,777	752	3,104	4,117
	1934	1,134	1,320	1,927	4,381	5,423
Flaxseed	- 1900	82	2	1	85	172
	1905	110	487	12	609	-
	1910	177	3,893	78	4,148	4,245
	1915	120	5,258	670	6,048	-
	1920	843	3,457	488	4,788	4,898
	1925	1,125	4,870	83	6,078	-
	1928	804	2,654	61	3,519	3,614
	1929	445	1,462	63	1,970	2,060
	1930	728	3,900	335	4,963	5,069
	1931	350	1,820	200	2,370	2,465
	1932	240	2,200	200	2,640	2,719
	1933	110	410	43	563	632
	1934	180	542	105	827	910
Mixed Grains	- 1910	9	9	78	96	13,086
	1915	22	60	670	752	-
	1920	40	46	489	575	20,212
	1925	223	306	83	612	-
	1928	252	594	409	1,255	39,130
	1929	221	344	358	923	35,754
	1930	347	478	560	1,385	44,276
	1931	232	242	595	1,069	39,431
	1932	376	349	731	1,456	39,036
	1933	542	311	464	1,317	33,009
	1934	393	189	462	1,044	37,926

TABLE 5.--Yield of Principal Crops, Prairie Provinces and Canada, 1900-34 - Cont'd.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		Ton	Ton	Ton	Ton	Ton
Hay (cultivated)	- 1910	125	45	125	295	10,406
	1915	88	35	246	369	-
	1920	50	15	168	233	8,593
	1925	83	11	78	172	-
	1928	853	821	493	2,167	16,515
	1929	570	502	384	1,456	15,833
	1930	787	696	517	2,000	16,397
	1931	413	201	394	1,008	13,960
	1932	683	219	356	1,258	13,559
	1933	847	207	361	1,415	11,443
	1934	767	171	372	1,310	11,155

TABLE 6.--Value of Field Crops, Prairie Provinces and Canada, 1900-34.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		\$	\$	\$	\$	\$
Field Crops	- 1900	16,669	4,608	2,618	23,895	194,953
	1910	45,509	79,955	17,015	142,479	384,514
	1915	96,891	273,354	98,576	468,821	-
	1920	104,489	219,313	142,268	466,070	933,046
	1925	93,191	368,275	157,227	618,693	-
	1928	113,492	348,586	220,786	682,864	1,125,003
	1929	78,919	235,218	157,254	471,421	948,981
	1930	52,975	135,695	110,284	298,954	662,041
	1931	24,847	70,347	98,916	194,110	435,966
	1932	31,937	98,217	95,913	226,067	452,527
	1933	35,653	82,708	86,499	204,860	453,598
	1934	50,233	94,441	108,499	253,173	544,975
Wheat	- 1910	28,584	50,213	6,676	85,473	104,817
	1915	62,663	203,838	58,326	324,877	-
	1920	61,143	183,592	92,695	337,430	374,179
	1925	40,940	294,281	116,735	451,956	-
	1928	48,192	247,336	112,480	424,039	451,235
	1929	30,279	165,382	94,385	290,046	319,715
	1930	23,980	97,149	66,150	187,279	204,693
	1931	11,526	50,337	50,617	106,010	123,550
	1932	16,736	74,043	53,554	144,333	154,760
	1933	16,986	60,162	46,050	123,198	136,958
	1934	24,115	67,378	61,875	153,368	163,972
Oats	- 1910	9,903	17,624	5,749	32,276	86,796
	1915	17,913	46,126	25,533	89,572	-
	1920	19,092	39,181	26,420	84,693	180,990
	1925	17,385	35,528	13,758	71,671	-
	1928	22,952	59,296	33,538	115,786	210,956
	1929	16,600	34,472	20,129	71,201	168,017
	1930	10,618	18,826	11,691	41,135	102,919
	1931	8,445	12,186	16,290	36,921	77,970
	1932	5,156	13,962	13,195	32,313	75,988
	1933	6,195	14,330	13,050	33,575	79,818
	1934	8,561	18,001	21,060	47,622	105,380

TABLE 6.--Value of Field Crops, Prairie Provinces and Canada, 1900-34 - Cont'd.

		"000" omitted				
		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		\$	\$	\$	\$	\$
Barley -	1910	2,925	1,300	1,075	5,299	14,654
	1915	8,420	4,391	4,340	17,151	-
	1920	10,184	4,229	4,917	19,330	33,514
	1925	19,063	8,445	4,836	32,344	-
	1928	28,387	21,248	7,449	57,084	76,112
	1929	19,720	15,685	6,257	41,662	60,505
	1930	8,496	4,863	2,660	16,019	27,254
	1931	3,234	3,011	4,368	10,613	17,465
	1932	4,003	4,446	3,152	11,601	18,855
	1933	4,563	4,214	2,812	11,589	18,954
	1934	7,957	5,457	5,716	19,130	29,107
Rye -	1910	20	6	59	85	1,838
	1915	167	130	232	529	-
	1920	1,876	1,556	2,514	5,946	8,104
	1925	2,479	2,063	599	5,141	-
	1928	1,670	6,225	2,075	9,970	11,491
	1929	1,123	6,806	1,906	9,835	11,095
	1930	472	2,528	557	3,557	4,402
	1931	158	552	242	952	1,476
	1932	112	1,246	426	1,784	2,284
	1933	186	591	236	1,013	1,603
	1934	567	582	839	1,988	2,581
Flaxseed -	1910	387	8,160	163	8,710	8,870
	1915	93	7,933	967	9,093	-
	1920	1,706	5,731	843	8,280	8,509
	1925	2,122	8,951	148	11,221	-
	1928	1,311	4,140	92	5,543	5,758
	1929	1,077	3,465	140	4,682	4,898
	1930	764	3,471	318	4,553	4,741
	1931	284	1,401	144	1,829	1,944
	1932	161	1,320	118	1,599	1,682
	1933	129	488	51	668	756
	1934	211	618	118	947	1,063
Mixed Grains -	1910	4	5	17	26	6,308
	1915	11	42	46	99	-
	1920	39	52	35	126	14,990
	1925	97	142	47	286	-
	1928	151	249	188	588	27,672
	1929	137	186	233	556	27,227
	1930	80	96	95	271	18,435
	1931	49	46	113	208	14,453
	1932	71	38	102	211	13,063
	1933	136	68	97	301	13,336
	1934	138	57	139	334	15,634
Hay (Cultivated)	1910	1,013	319	1,239	2,571	90,116
	1915	909	354	2,163	3,426	-
	1920	779	201	2,370	3,350	169,822
	1925	923	129	1,182	2,234	-
	1928	7,251	6,535	5,083	18,869	171,225
	1929	6,356	5,763	5,080	17,199	184,528
	1930	5,706	5,742	4,653	16,101	161,122
	1931	3,201	1,427	2,955	7,583	106,343
	1932	3,757	1,205	2,314	7,276	96,654
	1933	4,743	932	2,166	7,841	100,306
	1934	5,297	970	2,626	8,893	131,295

Wheat.— Wheat is the premier crop of Western Canada. The specialized wheat areas cover, roughly speaking, the southern short grass plains from the Red River valley of Manitoba to the foothills of Alberta and attain their greatest width in central Saskatchewan. The hard, dry, glutinous quality of Canadian prairie wheat is world famous. Apart from the effects of climate and soil its success has been largely due to the excellence of the "Red Fife" variety and of an improved variety called "Marquis", which after 1908 largely superseded the former. Despite much attention given in recent years to developing new, productive, early maturing and rust resisting wheats Marquis still holds its place as the most important variety grown.

Historical.— Wheat was first grown in Manitoba 120 years ago by the Selkirk settlers. The troubles of the early colonists were almost insuperable and agricultural progress was very slow. Early settlement followed the waterways. In 1878 the St. Paul railway entered Winnipeg and, from then on, wheat production played a large part in the economic history of the West. The census of 1881 revealed an area of 56,971 acres and a production of 1,153,328 bushels in the previous year. The economic production of wheat in western Canada is thus a movement of the past half-century.

In 1890, the Prairie Provinces had one-third and in 1900 over one-half of Canada's wheat area. The next two decades witnessed the real establishment of western wheat-farming. The first impetus to the movement came with the expansion of the British and European markets and later the temporary exit of Russia and the decline of the United States in international wheat trade gave Canada the place of chief exporter.

The development of western Canada may be divided into three periods. The first of these began with the building of the Canadian Pacific railway, about 1882 to 1885; the second, with railway extension and immigration influx about 1903; and the third in 1924 at the conclusion of the economic depression and unfavourable weather conditions which followed the Great War.

The Canadian Pacific railway tapped the southern short-grass plains, where wheat presented the path of least resistance on the way to quick prosperity. Settlement in this period came mainly from eastern Canada and Great Britain, and spread westward from the Red River valley of Manitoba into Saskatchewan and along the fertile banks of the Souris, Qu'Appelle and Assiniboine rivers. The development of this period was not as great nor as prolonged as that which began early in the present century. The United States was filling up cheap western lands at the time and the Dominion Government had not yet launched its land survey policy nor the encouragement of immigration which became so characteristic of later years.

The second period of rapid development occurred in the years 1903 to 1914. As the pioneer followed the water courses in settlement so the farmer followed (or in some cases, anticipated) the railways. The main line of the Canadian Pacific and its few branch lines adequately served the settled southern portion until the great rush of new settlement began in 1903. Settlement extended mainly into the park-lands of Saskatchewan and Alberta, although Manitoba continued to fill up rapidly during the first decade of this century. Colonization, railway construction and wheat acreage were inseparably related during this period of expansion which preceded the War.

Although the outbreak of the Great War brought an end to the rapid development in settlement and transportation of the previous decade, the period of the War was one of continued growth. Immigration continued from the neutral countries which more than offset the emigration to the battlefields of Europe. In spite of the farm labour shortage, only partly alleviated by urban volunteers and 'soldiers of the soil', the patriotic appeal for increased wheat acreage met with ready response. Food was needed in a quickly available form and the wheat crop offered the best means of securing it. The first wheat crop, seeded after the declaration of war covered over 3 1/2 million acres more than that of 1914 and the crop of 1918 was 5 1/3 million acres more, an increase of over 50 per cent. This was mainly accomplished by breaking new land and by some trespassing upon the coarse grain acreage. In the early years of the War, the wheat farmer was assisted by the weather and, when the years of low rainfall began in 1918, rising prices more than offset the lowering yields. When government price control was lifted in 1918, the Canada Wheat Board was authorized by the Government to control the movement and sale of Canadian wheat for another year. The Grain Exchange began to operate fully again in 1920.

During this period, new agricultural development was most evident in the northern sections of the Prairie Provinces. The opening of the Peace River and Grande Prairie districts in north-western Alberta was accomplished by the Edmonton, Dunvegan, and British Columbia (now the Northern Alberta) railway in 1915. At the end of 1910, there were only 46 householders in this region, but with the coming of the railway, settlement was very rapid, and continued into

the post-war period. In 1919, about ten thousand people moved into this area and, by 1926, the population of this somewhat isolated district had grown to 42,784. Since the estimated arable land of the Peace River valley amounts to about 15 million acres, there is room for much more development.

In 1911 the intensive wheat area of western Canada was located in southern Manitoba. Production in Saskatchewan was general in the south-eastern and the central portions of the province. A slight and somewhat scattered acreage was found in western Saskatchewan and in Alberta. By 1916 the picture had changed. An intensive wheat area had developed in central Saskatchewan commencing in the south-eastern section of the province and moving in a north-western direction. A noticeable increase in acreage had taken place in western Saskatchewan and throughout the province of Alberta. Wheat acreage in Manitoba had declined.

The demand of war and early post-war years resulted in the intensification of grain production in all three provinces. Increased wheat acreage was accompanied by increased areas sown to oats, barley and rye. By 1921 the area devoted to wheat in Manitoba had increased sharply as compared with an actual decrease in the preceding five years, while substantial increases were made in oats, barley, rye and flaxseed acreages. The same trend occurred in Saskatchewan. In Alberta the chief increase was in wheat acreage. Oats increased moderately, while only slight increases occurred in barley and rye. Flaxseed acreage decreased in both Saskatchewan and Alberta.

The deflation in 1921 and subsequent years brought about a decline in wheat and oats acreage in Manitoba as compared with an increase in barley acreage. In Saskatchewan, wheat acreage remained relatively stable. The acreage sown to oats and rye decreased sharply, while barley acreage increased sharply. Alberta wheat acreage increased and the area sown to oats decreased.

The years from 1926 to 1931 were years of expansion as far as wheat acreage was concerned. This period includes an important part of the era marked by the development of power farming on a large scale in western Canada, by the pushing of the wheat belt into new territory - both northern and southern sections of the West and by the first effects of a sharply declining price level. The net result of these factors was to again increase the area sown to wheat in all three provinces with the largest increase in Alberta. By 1931 wheat acreage in the Prairie Provinces had reached a total of 25,586,000 acres - a record up to that time.

From 1931 to 1934 wheat acreage in Manitoba remained relatively stable, declining only slightly from the level reached in 1932. Wheat acreage in Saskatchewan reached record levels in 1932 but has since declined by over 2 million acres. In Alberta a decline of about 700,000 acres has taken place since 1932. The 1934 acreage stood below the census figures of 1931 in all three provinces with the major decline in Saskatchewan.

Yields- There are wider fluctuations in the yield per acre of wheat than in the case of other small grains. The uncertainty of yield is particularly noticeable in Saskatchewan and Alberta where a considerable portion of wheat acreage is on or near the margin of requisite precipitation. Although the chances of crop failure are great in Alberta the average yield per acre has been appreciably higher than in the other two provinces. In all three provinces the trend in per acre yield was downward from 1908 to 1923 and then turned upward. A cycle of favourable climatic conditions was doubtless a contributory cause of the general improvement in yields following 1923, but in Saskatchewan and Alberta the bringing of large areas of virgin land under cultivation with the resumption of settlement appears to have been a determining factor. In Manitoba the effect of the shift from wheat to barley and oats production has been to confine the growing of wheat to areas where soil and climatic conditions favoured higher yields. Unfavourable climatic conditions following 1928 have resulted in low yields. The estimated wheat yield per acre in the Prairie Provinces in 1934 was considerably below the long time averages, but slightly higher than in 1933.

Wheat production in the Prairie Provinces in 1900 amounted to 23,455,000 bushels. By 1928 the record of 544,598,000 bushels was reached. Succeeding years were marked by adverse climatic conditions. Crop yields in each year since 1928 have been reduced in some degree by drought, the effects of which were felt most severely in the short-grass plains (particularly in southern and central Saskatchewan) the park lands further north and west being more favoured. The 1932 crop was the best of the six-year period since 1928 amounting to 422,947,000 bushels. In 1933 the damage was more widespread than usual and grasshoppers and other pests took a severe toll of the crop which fell to the low level of 263,004,000 bushels. In 1934 the Prairie Provinces had another very unfavourable growing season with large areas

affected by drought, soil drifting, extreme heat, pests, hail and frost. The most adverse conditions were experienced in the southern and central areas of the three provinces. Wheat production in Manitoba and Alberta was larger than in 1933 but smaller in Saskatchewan. The 1934 wheat crop of the three provinces is estimated at 263,800,000 bushels.

TABLE 7.--Wheat Yield per Acre.

	Manitoba	Saskatchewan	Alberta
	Bush.	Bush.	Bush.
Average 1909-13	19.0	20.0	20.4
Average 1914-18	16.7	15.9	20.3
Average 1919-23	14.2	15.0	15.6
Average 1924-28	18.2	17.6	20.1
1929	12.4	11.1	12.3
1930	17.7	14.4	20.5
1931	11.1	8.9	17.7
1932	16.0	13.6	20.4
1933	12.8	8.4	12.0
1934	14.6	8.6	15.0

Oats:- Of the cereal crops of the prairie region, oats come next to wheat in importance. The acreage devoted to this crop is now about 39 p.c. that of wheat for the region as a whole. Manitoba has over half as much land in oats as in wheat, Saskatchewan about one-third and Alberta somewhat over one-third. The use of mechanical power and more elaborate machinery, combined with the price factor, has tended to produce a disproportionate expansion in wheat acreage in the Prairie Provinces. With the low wheat price levels of recent years, however, the relative importance of oats and other coarse grains has increased.

Production of oats in the Prairie Provinces amounted to 16,654,000 bushels in 1900; to 297,676,000 bushels in 1928 and to slightly over 172,000,000 bushels in 1934. In 1900 the Prairie Provinces produced about 11 p.c. of the Canadian oat crop; in 1930 they produced almost 60 p.c. and in 1934 about 54 p.c.

As in the case of the other cereals, conditions of production and the element of risk vary considerably within the region. The yield per acre is greater in Alberta but as with wheat it is more uncertain, the speculative character of yield increasing as one moves westward. The uncertainty of adequate precipitation in the drier sections of the region is the principal cause of these differences. In 1934 the yields of oats in the southern parts of the Prairie Provinces were exceedingly low, while the crops in the northern sections of Saskatchewan and Alberta particularly, were severely damaged by frosts and unfavourable harvest weather.

The chief varieties of oats grown in the prairie region are Banner and Victory. Banner is a high yielding variety developed by the Dominion Experimental Farm at Ottawa. Victory originally came from Sweden. Because of its fine kernel, it is used extensively for exhibition purposes.

Barleys:- Barley ranks third among the small grains in the Prairie Provinces. It has the twofold advantage of being rust resisting and of requiring a shorter growing season than wheat. In 1900 the prairie region supplied less than 14 p.c. of the barley produced in Canada and in 1934 over 70 p.c.

Production of barley in the three provinces amounted to 3,142,000 bushels in 1900; to 112,684,000 bushels in 1928; and to 44,742,000 bushels in 1934. In 1934 the area sown to barley in the Prairie Provinces amounted to 2,962,000 acres, whereas during the five years 1929-33 the average area sown to this crop was 3,766,000 bushels.

The yield per acre is relatively steady. Barley is being used more and more as feed grain especially in the finishing of hogs.

Flax and Rye:- Flax and rye are crops of relatively minor importance in the Prairie Provinces. The flax acreage in the prairie region now constitutes less than 1 p.c. of the total land in field crops. Flax was relatively much more important during the years of maximum immigration. It was a very popular and profitable crop on newly broken land with its virgin fertility and freedom from weeds. Practically no flax for fibre is grown in western Canada.

Production of flaxseed in the Prairie Provinces, which in 1915 was over 6,000,000 bushels, amounted to 563,000 bushels in 1933 and to 827,000 bushels in 1934. The trend of acreage and production in recent years has tended to place Canada on an import basis as far as flaxseed is concerned.

Rye acreage in the prairie region is somewhat larger than flax. Approximately 52 p.c. of the rye acreage is in Saskatchewan, 35 p.c. in Alberta and 13 p.c. in Manitoba. Production in the three provinces amounted to 38,000 bushels in 1900; to almost 21,000,000 bushels in 1930 and to 3,104,000 bushels in 1933. The decreasing tendency in evidence since 1930 was reversed in 1934, production amounting to 4,381,000 bushels. The acreage seeded to rye in 1934 was 669,000 as compared with 520,000 in 1933. Although rye and flaxseed are relatively unimportant as compared with other cereal crops, the prairie region produces the major portion of the Canadian output.

Hay and Forage Crops:- The principal forage crop in the prairie region is hay of which wild or prairie hay constitutes about 90 p.c. Small grains cut for hay and summer feeding vary greatly in amount from year to year but regularly assume second place among the forage crops. Of the perennials, the timothy, clover and alfalfa group is the most important being followed by brome grass and western rye. In recent years increasing quantities of sweet clover have been grown, chiefly of the biennial variety. There are also small acreages of corn for fodder. All cultivated hay and forage crops constitute less than 5 per cent of the total field crop acreage and if the wild hay acreage be added the combined total represents only about 10 p.c. of the aggregate.

The limiting factor in the Canadian West is climate, particularly rainfall. Prairie hay is especially important in the sub-humid long grass portion of the region, i.e. in Manitoba, northern Saskatchewan and northern and western Alberta. In these districts considerable amounts of small grains are also cut for hay but relatively greater dependence is placed on the small grains in the drier central and southern sections of Saskatchewan and Alberta where the prairie grass is short and less abundant and the absence of adequate moisture prevents the successful raising of timothy, clover and alfalfa. Crops like brome grass and sweet clover do well in the semi-arid regions.

While potatoes are grown generally throughout the West, marked concentration of acreage is confined to areas adjacent to the larger cities and the irrigated zone of south western Alberta.

Values of Field Crops:- A survey of the values of the chief field crops in the Prairie Provinces and Canada is presented in table 6. The high point, it will be noted, was reached in 1928 when the value of field crops in the Prairie Provinces amounted to \$682,864,000 as compared with \$1,125,003 for all Canada. Drastic declines in succeeding years occurred, the low point of \$194,110,000 for the Prairie Provinces and \$435,966,000 for Canada being reached in 1931. There was a break in the downward trend in 1932 but a further decline occurred in 1933.

Significant increases in unit prices and some improvement in yields resulted in a decided improvement in 1934, the value of the field crops of the Prairie Provinces being estimated at \$245,790,000 and of Canada at \$536,499,000, the highest values since 1930. Manitoba's yields were affected by drought but with generally higher prices the value of field crops is estimated at \$50,233,000 or over 40 p.c. higher than in 1933. In Saskatchewan the severe drought offset most of the price increase, still there was an improvement of \$11 3/4 million, roughly 14 p.c. The estimate for Alberta shows an increase of \$22 million over 1933 or about 25 p.c. The value of the wheat crop of the Prairie Provinces is estimated at \$153,368,000 in 1934 as compared with \$123,198,000 in 1933 and \$424,039,000 in 1928. For further details see table 6.

The Canadian Grain Trade-- The natural disadvantages involved in the wide separation of the prairie grain fields from the markets of Europe have been considerably lessened by continued efforts to improve the marketing and transportation facilities. The Great Lakes and St. Lawrence river have been used to good advantage since the inception of the movement of grain to the Eastern Canadian and United States seaboard. The quantity exported through the St. Lawrence ports of Montreal and Quebec in 1928-29 was 102,175,824 bushels and through Montreal, Quebec and Sorel^x in 1933-34, 70,208,987 bushels. Exports through the Canadian seaboard ports of Saint John and Halifax amounted to 8,316,756 bushels in 1933-34 and exports routed via United States to 44,803,301 bushels as compared with 16,793,388 bushels and 184,734,634 respectively in 1928-29.

The westward route through Vancouver has been established for a number of years but not until the crop years 1921-22 did the movement reach any appreciable volume, when 18,212,826 bushels were exported. During 1933-34 exports of grain from the same port amounted to 49,428,831 bushels. Other ports on the Pacific coast exporting grain include New Westminster, Victoria and Prince Rupert. The port of Churchill on Hudson bay initiated shipments in 1931 (see page 83) and in 1934 exported 4,049,871 bushels.

The movement of grain at both interior and terminal points has been regulated by adequate elevator facilities. The necessary handling facilities have kept pace with the rapid expansion of grain shipments since the turn of the century. The operation of the licensed elevators of Canada is covered by the Canada Grain Act, which was extensively revised in 1930. The number of these elevators has grown from 523 with a capacity of 18,329,352 bushels at the end of the last century to 5,901 with a capacity of 419,592,660 bushels in 1934. They are divided into three principal groups, the Western Country, the Terminal and the Eastern elevators.

The Western Country elevators are those that handle grain direct from the farmer. In 1900-01 they numbered 518 with a total capacity of 12,759,352 bushels, while in 1933-34 the number had increased to 5,758 with a capacity of 192,750,000 bushels. Some of these, however, have been closed during the recent period of light crops.

Terminal elevators (as defined by the Canada Grain Act) are located at Fort William, Port Arthur, Churchill, and Vancouver. In 1900-01 there were only five licensed elevators at the head of the lakes with a total capacity of 5,570,000 bushels; the number, by 1934, had increased to thirty-four with a total capacity of 94,482,210 bushels. Vancouver is a comparatively recent elevator centre; there were two licensed elevators there in 1906-07 (the first year reported) with a joint capacity of 200,000 bushels, four in 1915-16 with a capacity of 1,631,000 bushels and 12 in 1933-34 with a total capacity of 21,443,000 bushels.

The Eastern elevators are located along the Lower Lakes, the river St. Lawrence and the Canadian seaboard. They were eighteen in number in 1908-09 and had a total capacity of 14,826,000 bushels; in 1933-34 the number was twenty-nine with a total capacity of 76,339,000 bushels.

The strictest supervision of grading is maintained in order to establish the high quality of Canadian grain abroad. Cleaning and drying facilities are available at both interior and terminal elevators, and grading is superintended by the Board of Grain Commissioners, established in 1912 for the management and control of the grain trade of Canada.

The export trade in Canadian wheat has greatly increased in the past half-century, although the actual amounts exported in recent years vary widely with growing conditions in Canada and the state of markets abroad. Record levels of wheat and wheat flour exports were reached following the bumper crop of 1928, and in the crop year 1928-29, 407,564,187 bushels of wheat and wheat flour (expressed as wheat) were exported from Canada. Although Canada stands third to the United States and Russia among the wheat-producing countries of the world, she is normally first among the wheat-exporting nations. Even with the relatively short crops of the past few years, this position has been well maintained. An historical survey of the movement of Canadian wheat and wheat flour is presented in table 8.

^x Sorel did not export until 1929-30.

TABLE 8.--Production, Imports, Exports and Home Consumption of Wheat in Canada, 1870-33.^x

Year	Esti- mated Popula- tion	Pro- duction	Imports			Exports			Apparent Home Con- sumption
			Wheat	Wheat Flour	Wheat and Flour	Wheat	Wheat Flour	Wheat and Flour	
	000	000 Bush.	Bush.	Brl.	Bush.	Bush.	Brl.	Bush.	000 Bush.
1870	3,625	16,724	4,201,657	392,843	5,969,451	1,748,977	306,339	3,127,503	23,563
1880	4,255	32,350	76,652	197,581	965,767	2,523,673	439,728	4,502,449	28,813
1890	4,779	42,223	147,521	57,489	806,222	2,108,216	296,784	3,443,744	39,185
1900	5,301	55,572	104,782	46,638	314,653	9,739,758	1,118,700	14,773,908	41,113
1901	5,371	85,305	148,326	47,143	360,470	26,117,530	1,086,648	31,007,446	54,658
1902	5,494	93,569	84,931	35,247	243,543	32,985,745	1,287,766	38,780,692	55,032
1903	5,651	78,496	37,171	40,849	220,992	16,779,028	1,587,600	23,923,228	54,794
1904	5,827	69,029	92,406	42,397	283,193	14,700,315	1,321,469	20,646,926	48,665
1905	6,002	106,097	64,927	41,912	253,531	40,399,402	1,532,014	47,293,465	59,057
1906	6,197	125,505	35,251	44,072	233,575	39,434,658	1,562,491	46,465,868	79,273
1907	6,411	93,105	104,267	44,194	303,140	40,077,950	1,667,903	47,583,514	45,825
1908	6,625	112,434	28,186	33,489	178,887	47,696,065	2,008,349	56,733,636	55,879
1909	6,800	166,744	73,078	30,273	209,307	52,623,887	3,374,268	67,808,093	99,145
1910	6,988	132,078	107,903	66,608	407,639	48,442,780	3,101,185	62,398,113	70,088
1911	7,207	231,237	140,626	52,191	375,486	78,786,889	4,180,892	97,600,903	134,012
1912	7,389	224,159	619,031	60,079	889,387	95,510,826	4,496,299	115,744,172	109,304
1913	7,632	231,717	129,823	50,632	357,667	114,902,121	4,596,739	135,587,447	96,487
1914	7,879	161,280	1,964,466	47,905	2,180,039	63,901,874	5,077,389	86,750,125	76,710
1915	7,981	393,543	131,308	38,638	305,179	235,738,776	7,426,437	269,157,743	124,690
1916	8,001	262,781	86,043	48,531	304,433	140,223,819	7,631,429	174,565,250	88,520
1917	8,060	233,743	183,639	21,693	281,258	118,579,601	11,257,942	169,240,340	64,784
1918	8,148	189,075	290,891	6,815	321,559	55,921,319	9,119,796	96,960,401	92,436
1919	8,311	193,260	115,420	19,186	201,757	63,450,123	6,455,429	92,499,554	100,962
1920	8,556	226,508	304,642	33,357	454,749	136,968,832	6,721,469	167,215,443	59,747
1921	8,788	300,858	193,234	39,935	372,942	150,935,359	7,740,960	185,769,679	115,461
1922	8,919	399,786	93,571	67,544	397,519	229,849,410	11,003,460	279,364,980	120,819
1923	9,010	474,199	40,772	88,882	440,741	292,425,153	12,021,424	346,521,561	128,118
1924	9,144	262,097	352,923	61,660	630,393	146,958,158	10,169,692	192,721,772	70,006
1925	9,294	395,475	154,963	49,829	379,194	275,557,078	10,896,654	324,592,021	71,262
1926	9,451	407,136	139,486	59,474	407,119	251,265,788	9,247,824	292,880,996	114,662
1927	9,637	479,665	148,904	72,410	474,749	288,567,390	9,865,754	332,963,283	147,176
1928	9,835	566,726	994,922	77,991	1,345,881	354,424,699	11,808,775	407,564,187	160,508
1929	10,029	304,520	1,003,998	82,384	1,374,726	155,766,106	6,778,023	186,267,210	119,628
1930	10,208	420,672	131,608	25,025	244,221	228,536,403	6,701,663	258,693,887	139,743
1931	10,376	321,325	123,524	20,623	216,328	182,803,382	5,383,594	207,029,555	116,091
1932	10,506	443,061	51,320	27,043	173,014	240,136,568	5,370,613	264,304,327	99,143
1933	10,681	269,729	10,676	89,442	413,165	170,234,013	5,454,636	194,779,875	93,751

The World Wheat Situation.-- Two basic factors may be cited in explanation of the existing wheat situation.

1. The general fall in the level of prices which naturally carried wheat prices downward.
2. The maladjustment of supply and effective demand as a result of which abnormal stocks of wheat have been built up in exporting countries, these in turn reacting unfavourably upon wheat prices in world markets.

^x (1) For the above table, wheat flour has been converted into bushels of wheat at the uniform average rate of 4 1/2 bushels to the barrel of 196 lb. of flour. (2) The exports and imports relate to the years ended June 30, 1870-1905 and the years ended July 31, 1906-33.

One of the chief factors in building up these large surpluses has been the trend of wheat acreages during and since the world war in both exporting and importing countries. Between 1914 and 1922 Canadian wheat acreage more than doubled, that of the United States increased by 10 million acres and that of Argentina and Australia in lesser degree. European wheat acreage increased steadily from 1922 on, pre-war acreage being exceeded in 1927. The full effect of these increased acreages was apparent in 1928 when high yields per acre were harvested in Europe and exporting countries and world production reached a record up to that time.

With the sharp decline in wheat prices in 1929 and subsequent years, importing countries increased tariffs, adopted price fixing arrangements, quota regulations, exchange controls and other restrictive measures designed to protect domestic price levels, to enable them to become independent of foreign foodstuffs, and to protect their money and banking systems and maintain national solvency during the period of depression. Such measures naturally tended to reduce world trade in wheat and made it increasingly difficult to reduce surplus stocks. At the same time, restrictions on importations and maintenance of price levels in the large importing countries tended to further increase wheat acreage in these countries. The instability of exchange and reduced purchasing power, together with restrictive measures such as these above mentioned, have tended to diminish greatly not only trade in wheat but all foreign commerce generally.

Yearly and monthly average prices of No. 1 Manitoba Northern cash wheat, 1913 to date, are shown in table 9. Table 10 shows the world wheat carry-over and that of Canada in recent years.

TABLE 9.--No. 1 Manitoba Northern Wheat.

(Average price per bushel, Fort William and Port Arthur basis)

Year	Year	Year	Year
1913 \$0.8819	1919 \$2.371	1925 \$1.641	1930 \$0.942
1914 1.001	1920 2.511	1926 1.495	1931 587
1915 1.282	1921 1.649	1927 1.481	1932 556
1916 1.381	1922 1.235	1928 1.348	1933 609
1917 2.202	1923 1.084	1929 1.343	1934 748
1918 2.223	1924 1.274		
<u>1930</u>	<u>1931</u>	<u>1932</u>	<u>1933</u>
Jan. \$1.301	Jan. \$0.539	Jan. \$0.600	Jan. \$0.442
Feb. 1.174	Feb. 593	Feb. 632	Feb. 458
March 1.062	March 567	March 631	March 492
April 1.098	April 597	April 626	April 536
May 1.080	May 606	May 629	May 633
June 1.032	June 607	June 551	June 668
July 951	July 573	July 547	July 834
Aug. 925	Aug. 551	Aug. 563	Aug. 734
Sept. 781	Sept. 536	Sept. 519	Sept. 672
Oct. 745	Oct. 599	Oct. 482	Oct. 605
Nov. 644	Nov. 673	Nov. 467	Nov. 637
Dec. 554	Dec. 606	Dec. 424	Dec. 602
<u>1934</u>	<u>1935</u>	<u>1936</u>	<u>1937</u>
Jan. \$1.301	Jan. \$0.539	Jan. \$0.600	Jan. \$0.442
Feb. 1.174	Feb. 593	Feb. 632	Feb. 458
March 1.062	March 567	March 631	March 492
April 1.098	April 597	April 626	April 536
May 1.080	May 606	May 629	May 633
June 1.032	June 607	June 551	June 668
July 951	July 573	July 547	July 834
Aug. 925	Aug. 551	Aug. 563	Aug. 734
Sept. 781	Sept. 536	Sept. 519	Sept. 672
Oct. 745	Oct. 599	Oct. 482	Oct. 605
Nov. 644	Nov. 673	Nov. 467	Nov. 637
Dec. 554	Dec. 606	Dec. 424	Dec. 602

TABLE 10.-- World and Canadian Carry-over of Wheat, 1926-34. ^x

About August 1	World Carry-over	Canadian Carry-over ^y
	Bushels	Bushels
1926	611,000,000	34,817,257
1927	647,000,000	47,839,285
1928	703,000,000	77,626,071
1929	971,000,000	104,383,221
1930	921,000,000	111,094,912
1931	1,007,000,000	134,078,963
1932	998,000,000	131,844,806
1933	1,099,000,000	211,740,188
1934	1,131,000,000	193,322,863

^x Sources: World carry-over, Wheat Advisory Committee; Canadian carry-over, Dominion Bureau of Statistics.

^y In Canada.

The world wheat situation was considerably brightened in 1934. Subnormal yields over large sections of North America as well as in the Danubian countries and Australia exercised a favourable effect upon surplus stocks. The United States 1934 wheat crop, the smallest since 1893, was considerably under domestic needs and the corn crop was also sharply down. European production was less than the previous year by some 300,000,000 bushels. As a result, supplies available for export from Canada are now more nearly in line with the quantities which restricted importing markets may be expected to absorb during the present crop year. The United States purchased considerable quantities of wheat, oats and barley in the latter part of 1934, thus brightening Canada's export picture and it is expected that such purchases will continue. Reference has already been made to the higher prices prevailing in 1934.

Business generally, in most countries, has made important recoveries from the depression lows. Rising prices and trends of general production show promise of a return of purchasing power and the restoration of effective demand to more normal proportions. With returning prosperity the removal of some of the current obstructions on international trade may be expected. Already in some countries a tendency towards the lifting of exchange control measures is apparent and fluctuations in currency values have narrowed considerably with the promise of reasonable stability at new levels. The lifting of tariff barriers and other trade restrictions, however, is likely to be a more gradual and possibly a very slow process. Much of the intensely nationalist feeling, especially in European countries, is the result of fear, and self sufficiency policies are likely to be maintained for a considerable period.

In view of the fact that world demand for wheat is likely to continue restricted for some years together with the fact that normal production in exporting countries would probably result in surpluses in excess of import requirements, any increase in spring wheat acreage in Canada at the present time would seem inadvisable. The past few years have demonstrated the vital importance of maintaining liberal reserves of feed grains, fodder and seed on the farm and suggest that sections well suited to the production of coarse grains, such as the northern parts of the Prairie Provinces, might devote a larger area to the production of these grains and less to wheat.

In general, it may be said that the wheat situation has been alleviated but that the problem is by no means solved. While adverse climatic conditions on a large scale have afforded relief, the law of averages would indicate that such relief is merely temporary and that the return of favourable climatic conditions will again intensify the world problem. The attainment and maintenance of an approximate equilibrium between world wheat production and effective world demand presents almost insuperable difficulties. It seems reasonable to assume, however, that the alternative to continued over expanded wheat acreages and a competitive struggle for world markets, inevitably resulting in loss of purchasing power and a lower standard of living in exporting countries, must be the development of good will and co-operative action by the nations vitally interested in the solution of this problem.

Since Canada is first among the wheat exporting countries of the world and since the Prairie Provinces produce over 90 p.c. of Canada's wheat crop, these provinces have naturally been severely affected by the existing world situation. Economic conditions in the Prairie Provinces during the past five years have, in fact, constituted for Canada a problem of major importance. With reduced crop yields and drastically low price levels for his products as compared with prices of the things he had to buy and in many cases with an accumulation of debts contracted when higher price levels existed, the position of the average prairie farmer has been extremely difficult. The drought, which in varying degrees since 1928 has affected the southern and central parts of the prairie region, while exercising a favourable effect upon the burdensome accumulation of world supplies, has resulted in heavy losses to prairie farmers. In certain sections, notably in southern Saskatchewan, there was such acute distress that direct government relief to farmers became necessary.

Recognizing the existence of a national emergency, the Dominion Government took various steps deemed necessary to prevent a total collapse of wheat prices and to ensure orderly marketing of successive wheat crops. Government assistance was provided for the distribution of seed grain, for the movement of feed and fodder into dried out areas and for the movement of farmers' livestock and farmers themselves from the drought areas to the northern districts.^x

^xFor a more detailed discussion of Government relief measures see Chapter VII.

Two statutes affecting rural credit were passed at the last session of Parliament. The Farmers' Creditors Arrangement Act provides for the rearrangement or readjustment of indebtedness and also machinery whereby the farmer who is hopelessly involved can, inexpensively, go through bankruptcy. The Treasury has made available to the Farm Loan Board an additional \$10,000,000 for rural credits and under the provisions of the Act further sums may be made available. The Board is given greater powers in the matter of extending credits and provision is made for second mortgages in certain cases. The rates of interest are fixed at 5 1/2 p.c. in the case of the long-term first mortgage and 6 1/2 p.c. in the case of the short-term second mortgage. These debt adjustment provisions, the trend towards lower interest rates and better terms of payment were important influences in alleviating the farmer's position in 1934 and should be more helpful in 1935.

Agricultural Co-operation - The Wheat Pools:- Co-operative organization forms an integral part of the economic fabric of Canadian agriculture. The largest co-operatives are found in western Canada and function in the distribution of farm products. The activities of the larger organizations such as the wheat pools and livestock co-operatives have reached a high stage of development and have received world wide recognition. Strong organizations exist also in the dairy products and poultry fields.

The grain producers of the Prairie Provinces early co-operated in the ownership and working of grain elevators, the Saskatchewan Co-operative Elevator Company established in 1911 and the United Grain Growers established in 1918 handling between them in a large grain year something like 73 million bushels.

The wheat pools grew out of the success of the Government control of grain marketing during the war which control ceased in 1920. The three voluntary western wheat pools began operations, Alberta, on October 29, 1933; Saskatchewan, on September 8, 1924; and Manitoba, on January 28, 1924. In 1924 representatives of each organized a central selling agency, under a Dominion charter, with the title of the Canadian Co-operative Wheat Producers, Ltd. The method of working was to secure five-year contracts with as many wheat growers as possible for the disposal of all the wheat grown by them, with the exception of the quantities reserved for seed and food. An initial payment was made to the farmer on delivery of his wheat with further payments in accordance with the price ultimately received for the crop.

With the drastic decline in wheat prices in 1929 and later years, it became apparent that the principle of pooling, practised on a declining market, involved financial hazards not fully realized in the earlier years of the co-operatives. With rapidly declining prices the Pools' initial payments in both 1930 and 1931 proved too high and with large holdings unsold, the Pools became involved in serious financial difficulties. The three provincial Governments and later the Dominion Government lent assistance by guaranteeing the loans of the banks to the Pools. The Central Selling Agency continued to operate in connection with the holdings of the 1930 and previous crops, but on July 31, 1931 the wheat pools ceased to deliver wheat to the central agency and were reorganized as co-operative elevator companies. Manitoba Pool Elevators Limited, Saskatchewan Pool Elevators Limited and Alberta Pool Elevators Limited, during the past three years, have operated independently as co-operative grain handling concerns on the patronage dividend basis. In addition, the United Grain Growers' Limited is a joint stock company operating in the Prairie Provinces and largely owned by farmers.

The International Wheat Agreement:- An attempt to solve the basic difficulties in the wheat situation by international economic co-operation resulted in the International Wheat Agreement of 1933. From 1929 to the early part of 1933 importing countries and, to a lesser extent, exporting countries endeavoured to protect themselves from the immediate effects of low wheat prices and the persistence of a world surplus of wheat. The restrictive policies adopted by individual countries were of no direct assistance in solving the basic problem. Stocks of wheat in exporting countries were considerably larger in 1933 than in 1930.

Following the World Economic Conference in the summer of 1933, a conference of countries interested in wheat met in London late in August. An attempt was made to reconcile the conflicting interests of importing and exporting countries. The resulting International Wheat Agreement signed by twenty-two nations had three major objectives: 1. To adjust supplies of wheat to effective world demand; 2. To eliminate abnormal surpluses; 3. To bring about a rise and stabilization of prices.

Importing countries agreed to take no further steps to increase domestic production of wheat, to commence to reduce restrictions against imports when the international price of wheat reached a certain level, and to promote the consumption of wheat in their respective countries.

Exporting countries agreed to limit the total volume of exports during 1933-34 in keeping with estimated import requirements. Export quotas were allocated to the chief exporting countries on the basis of an estimated world trade in wheat during 1933-34 of 560 million bushels. The four large exporters, Canada, the United States, the Argentine and Australia further agreed to limit exports during 1934-35 to an amount equal to the average yield on the average acreage sown in the three years from 1931 to 1933 less 15 p.c., less normal domestic requirements.

The results of the first year's working of the International Wheat Agreement illustrate the serious difficulties that such agreements are liable to encounter. Not only did world demand fall short of that expected so that the initial quotas proved too high, but certain countries were unable to carry out their obligations. Abnormal low yields in 1934 in many countries, which exercised a beneficial effect upon the liquidation of surpluses obscured, to some extent, the working of the Treaty. At the time of writing a generally acceptable basis for extending the agreement has not yet been found.

B.—Live Stock and Animal Products

With the coming of the white settler to the prairies, the buffalo was replaced by the cattle and horses of the early rancher and the live stock of the homesteader. Although greatly overshadowed by the grain growing industry, the raising of live stock in the Prairie Provinces has made substantial progress, the numbers of farm animals having increased steadily since the beginning of the century with only occasional set backs. This increase is associated with an enlarging area of settlement and a growing volume of fodder crops. The live stock of the region, as a whole, is deriving a larger proportion of its feed from cultivated land than was the case early in the century and with the increased density of population and its expansion into the sub-humid park belt, there has been a gradual shifting from beef production to dairying. This trend is shown in the increasing proportion that milch cows constitute of all cattle.

The number and value of the chief kinds of live stock in the Prairie Provinces and Canada according to the decennial and quinquennial censuses and as estimated by the Agricultural Branch of the Dominion Bureau of Statistics for more recent years are shown in tables 11 and 12.

TABLE 11.—Numbers of Farm Live Stock, Prairie Provinces and Canada, 1901-34.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		No.	No.	No.	No.	No.
Horses ^x	1901	163,867	83,801	92,661	340,329	1,577,493
	1911	280,374	507,468	407,153	1,194,995	2,598,958
	1916	327,402	841,507	634,188	1,803,097	-
	1921	357,069	1,084,160	810,016	2,251,245	3,463,585
	1926	342,448	1,109,516	787,368	2,239,332	-
	1931	325,634	1,000,397	733,841	2,059,872	3,120,689
	1933	307,000	946,900	706,300	1,960,200	2,984,095
	1934	296,000	932,200	698,300	1,926,500	2,933,492
Milch Cows	1901	141,481	56,634	46,101	244,216	2,408,677
	1911	155,328	181,168	147,649	484,145	2,595,255
	1916	197,825	322,767	277,324	797,916	-
	1921	225,699	414,581	381,834	1,022,114	3,228,633
	1926	245,901	438,245	405,718	1,089,864	-
	1931	279,505	480,286	438,954	1,198,745	3,523,001
	1933	304,500	480,400	406,500	1,191,400	3,694,000
	1934	339,100	556,000	461,700	1,356,800	3,864,200

^xFigures for census years include small numbers of mules.

TABLE 11.--Numbers of Farm Live Stock in the Prairie Provinces and Canada, 1901-34 - Cont'd.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		No.	No.	No.	No.	No.
All Cattle	1901	349,886	268,779	322,960	941,625	5,576,451
	1911	435,568	633,638	739,725	1,808,931	6,526,083
	1916	557,084	1,013,023	1,160,090	2,730,197	-
	1921	645,925	1,295,910	1,383,552	3,325,387	8,369,489
	1926	610,002	1,160,125	1,169,012	2,939,139	-
	1931	668,878	1,188,884	1,124,615	2,982,377	7,973,031
	1933	805,900	1,446,100	1,471,800	3,723,800	8,876,000
	1934	794,800	1,504,500	1,570,200	3,869,500	8,951,900
Sheep	1901	29,464	66,048	87,104	182,616	2,510,239
	1911	37,322	114,216	133,592	285,130	2,174,300
	1916	76,762	124,237	294,690	495,689	-
	1921	112,788	194,660	431,464	738,912	3,200,467
	1926	112,703	161,831	504,849	779,383	-
	1931	216,790	281,013	785,929	1,283,732	3,627,116
	1933	212,800	360,000	664,300	1,237,100	3,385,800
	1934	216,000	448,200	696,200	1,360,400	3,421,100
Swine	1901	126,459	27,847	46,069	200,375	2,353,828
	1911	188,416	286,295	237,511	712,222	3,634,778
	1916	216,040	530,727	603,354	1,350,321	-
	1921	200,167	419,709	423,258	1,043,134	3,324,291
	1926	304,434	597,660	701,277	1,603,371	-
	1931	390,043	949,055	1,052,128	2,391,226	4,699,831
	1933	262,300	648,600	954,000	1,864,900	3,800,700
	1934	242,000	596,400	896,100	1,734,500	3,654,000
Poultry	1901	1,167,876	297,344	251,799	1,717,019	17,922,658
	1911	2,585,903	3,393,403	2,453,117	8,432,423	31,793,261
	1916	2,183,747	4,618,825	2,855,491	9,658,063	-
	1921	3,461,325	7,857,828	5,176,302	16,495,455	43,347,194
	1926	4,516,450	9,180,674	6,127,541	19,824,665	-
	1931	5,566,793	11,518,707	8,262,330	25,347,830	65,184,689
	1933	4,812,400	10,347,900	7,609,200	22,769,500	59,324,400
	1934	4,794,900	10,434,300	7,803,600	23,032,800	59,798,700

NOTE: The Census of 1901 was taken on March 31, on which date numbers of live stock are materially smaller than on June 1, the date of subsequent censuses.

TABLE 12.--Value of Farm Live Stock in the Prairie Provinces and Canada, 1901-34.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		\$	\$	\$	\$	\$
Horses	1901	15,763	6,407	4,609	26,779	118,279
	1911	47,189	88,759	56,440	192,388	381,916
	1916	51,137	142,293	77,705	271,135	-
	1921	47,776	136,925	76,072	260,773	416,494
	1926	31,436	97,155	49,605	178,196	-
	1931	20,055	53,919	33,775	107,749	205,485
	1933	13,815	35,982	22,602	72,399	154,215
	1934	14,504	39,152	27,234	80,890	168,132

TABLE 12.--Value of Farm Live Stock in the Prairie Provinces and Canada, 1901-34 - Cont'd.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		\$	\$	\$	\$	\$
Milk Cows	1901	4,755	1,841	1,735	8,331	69,238
	1911	6,247	7,836	6,369	20,452	109,576
	1916	11,920	20,697	17,488	50,105	-
	1921	12,162	24,015	22,045	58,222	-
	1926	10,583	17,732	15,843	44,158	-
	1933	7,917	12,971	11,789	32,677	113,115
	1934	7,799	13,344	12,004	33,147	110,721
All Cattle	1901	8,699	5,540	10,466	24,705	-
	1911	12,558	21,834	22,671	57,063	-
	1916	23,315	44,162	52,356	119,833	-
	1921	22,757	48,987	51,602	123,346	335,085
	1926	17,503	31,647	31,467	80,617	-
	1931	18,748	33,302	34,943	86,993	255,607
	1933	15,939	27,457	28,834	72,230	201,567
	1934	14,179	26,623	28,632	69,434	195,378
Sheep	1901	144	273	333	750	10,491
	1911	224	621	758	1,603	10,702
	1916	650	943	2,067	3,660	-
	1921	798	1,438	2,674	4,910	20,675
	1926	935	1,342	4,424	6,701	-
	1931	1,173	1,501	3,819	6,493	19,680
	1933	751	1,246	2,352	4,349	13,549
	1934	754	1,479	2,492	4,725	14,298
Swine	1901	872	184	256	1,312	16,446
	1911	1,604	2,513	1,995	6,112	26,987
	1916	2,249	5,138	5,298	12,685	-
	1921	2,347	4,894	4,281	11,522	35,869
	1926	3,243	5,909	6,808	15,960	-
	1931	2,465	5,293	6,198	13,956	33,288
	1933	2,188	5,059	7,203	14,450	33,804
	1934	2,255	5,129	7,572	14,956	36,029
Poultry	1901	418	117	110	645	5,724
	1911	1,122	1,998	1,357	4,467	14,654
	1916	1,223	2,616	1,573	5,412	-
	1921	2,042	4,227	2,698	8,937	26,588
	1926	2,197	4,049	2,626	8,872	-
	1931	2,046	3,935	2,920	8,901	27,989
	1933	2,363	4,154	3,080	9,597	33,456
	1934	2,479	4,494	3,513	10,486	35,398

Horses:- Horses are found on more farms in Western Canada than any other class of live stock. Of every 10 farms over 8 have one or more of these work animals; the average farm has nine.

Horses (including mules) on farms in the Prairie Provinces increased from 340,329 in 1901 to 2,251,245 in 1921, declined to 2,059,872 in 1931 and to 1,926,500 in 1934. Of the total number in 1931 about half was in Saskatchewan and slightly less than one-third in Alberta. Approximately 66 p.c. of all horses in Canada are found in the prairie region. In Saskatchewan and Alberta there are more horses than people. Yet the numbers per 100 acres improved land are generally smaller and in most cases very much smaller than are found in older and more intensively cultivated provinces like Ontario.

The relation between work animals on the one hand and improved acreage in field crops on the other has passed through three stages in the agricultural development of the West. During the period of early settlement both improved and cropped acreage grew more rapidly than the number of work animals. The farmer broke his land and put in his crops with his team of oxen or horses as the case might be. His initial stock of implements and draught animals was all he could handle or afford and few additions were made. This stage of development characterized Manitoba between 1881 and 1901 and Saskatchewan between 1901 and 1911. Then followed a period of consolidation when the farmer supplemented his implements and machinery or replaced them with better ones and raised or bought more horses. In this period horses increased faster than either improved acreage or field crops. Such was the situation between 1901 and 1916 in Manitoba and between 1911 and 1921 in Saskatchewan. The final stage came with the replacing of the horse by the tractor and other power driven machinery during which both improved acreage and acreage in crops expanded more rapidly than the number of horses. The beginning of this latter phase dates from about 1916 in Manitoba and 1921 in Saskatchewan. These stages are not easily discerned in Alberta because of the prevalence of ranching.

At the beginning of the century the inhabited section of Alberta was a country of ranches. At that time there were 500 horses for every 1,000 acres under field crops, but the homesteader gradually encroached on the open range and settled up the other portions of the province with the result that the cultivation of land increased in relative importance while ranching declined. In 1931 there were 61 horses per 1,000 acres under field crops in Alberta as against 56 in Manitoba and 45 in Saskatchewan. Ranching is, of course, still an important industry in southern Alberta and in the foot hill region and also in south-western Saskatchewan.

The rapid growth in the use of power driven machinery on western farms is illustrated by table 13, which shows the numbers of tractors, combines, automobiles and motor trucks reported in the censuses of 1921, 1926 and 1931.

TABLE 13.--Tractors, Combines, Automobiles and Motor Trucks in the Prairie Provinces and Canada, 1921, 1926 and 1931.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		No.	No.	No.	No.	No.
Tractors	1921	10,027	19,243	9,215	38,485	47,455
	1926	12,151	26,674	11,311	50,136	-
	1931	14,366	43,308	23,985	81,659	105,360
Combines	1931	355	6,019	2,523	8,897	8,917
Automobiles	1921	16,645(1)	36,098(1)	20,616(1)	73,359(1)	157,022(1)
	1926	20,208	52,177	29,144	101,529	-
	1931	25,588	65,094	42,817	133,499	321,284
Motor Trucks	1921	(1)	(1)	(1)	(1)	(1)
	1926	952	3,267	1,421	5,640	-
	1931	3,260	10,938	7,319	21,517	48,401

(1) Motor trucks were included with automobiles in 1921.

Sales of new tractors in the Prairie Provinces in 1928, according to a reliable estimate, numbered over 17,000 or as many as during the first five years of the decade. Sales dropped to somewhat over 14,500 in 1929, and to a low point of 762 in 1933 but increased to 1,455 in 1934. Sales of combines numbered less than 200 in 1926, reached a high point of over 3,650 in 1928, declined to 3,500 in 1929 and very rapidly thereafter reaching a low point of 68 in 1934.

The large scale grain farming of the middle and western portion of the prairie region benefits most from this costly labour-saving machinery. In addition to reducing labour requirements the mechanization of farm operations tends to curtail the use of horses and to enlarge the size of farm units. Its continued extension would, in time, inevitably lead to important readjustments in the agricultural economy of the West and in its population distribution. While the slowing down of the trend towards mechanization, as evidenced by the above figures, may be a temporary phase, due to the depleted purchasing power of the western farmer, it represents, to some extent, a reaction to the view that mechanization may have proceeded too fast and is not always desirable nor economical. The prevailing low prices for farm commodities and recognition of the economy of the horse as a source of farm power have stimulated the market for

farm work horses, of which a marked scarcity exists. Prospects point to improvement in both production and market demand. Horse breeders' clubs in the Prairie Provinces in 1934 numbered 166, an increase of 32.8 p.c. over 1933.

Cattle:- While the cattle industry of the West dates back to the founding of the Red River settlements in 1812, progress was slight before 1875. In the period between 1875 and 1900 when the first continental railway brought an influx of settlers and opened eastern markets to the ranchers of southern Saskatchewan and Alberta, cattle raising expanded rapidly. Dairying soon developed in Manitoba and the sub-humid sections of the other two provinces, where more plentiful moisture made for abundant hay and superior pasture.

The number of milch cows in the Prairie Provinces increased from 244,216 in 1901 to 1,356,800 in 1934, or by over 450 p.c. The proportion of milch cows to total cattle has grown rapidly and practically continuously since 1901. In Saskatchewan, milch cows constituted 21 p.c. of all cattle in 1901 and over 40 p.c. in 1931. In Alberta the proportions were 14.3 p.c. in 1901 and 39 p.c. in 1931, while in Manitoba they were 40.4 p.c. in 1901 and 41.8 p.c. in 1931. The proportion of milch cows is much higher in the moister sub-humid section of the region than in the dry belt.

Since the war the trend from beef production to dairying has been accelerated. Dairy cows require much less feed to produce an equivalent amount of human food than do beef cattle and only a fraction of the crop land. The growth of dairying, therefore, like the change from mutton to pork production is one phase of the transition towards the more economical use of land and a natural consequence of the growing density of population.

Beef production is still an important industry, however, a fact which is reflected in the high ratio between cattle and population. There are about 1,600 head of cattle per 1,000 people in the region as a whole, (over 2,000 in Alberta) as compared with 700 in Ontario and less than 600 in Quebec.

Since 1900 the separation between the farm and the manufacturing and marketing of animal products has become more and more pronounced leading to the development of an important slaughtering and meat packing industry.

During the years 1931-33 the trend of beef cattle production in the Prairie Provinces was up, but declined slightly during the present year. Cattle prices reached record low levels in 1933 but improved somewhat in 1934. The United States' tariff of 1930 greatly curtailed the export of cattle to that country and the consequent overloading of the domestic market greatly depressed prices. The British market represents the chief export outlet for beef cattle at present.

Sheep:- In the ranching districts of Alberta sheep are raised in large flocks, the average farm reporting sheep having over 115. In Manitoba and Saskatchewan, on the other hand, sheep raising is a subsidiary part of the farm economy. The average flock numbers somewhat over 40 in the former and over 50 in the latter province. In Manitoba and Saskatchewan, the cold and often stormy weather in early spring tends to prevent a wide distribution of this class of live stock, but the climate of western and southern Alberta is more favourable.

Farms reporting sheep in Alberta numbered 3,129 in 1916; 4,110 in 1921; 4,524 in 1926 and 6,784 in 1931. The high prices of wool and mutton during the war stimulated production, but when prices dropped many prairie farmers quickly went out of sheep raising. Farms reporting sheep in Manitoba rose from 3,830 to 6,984 between 1916 and 1921; fell to 3,486 by 1926, but rose to 4,891 by 1931. Farms reporting sheep in Saskatchewan declined from 4,128 in 1921 to 3,861 in 1926, but rose to 5,055 in 1931. The latter increases are indicative of the tendency towards mixed farming in many parts of western Canada in an endeavour to increase farm revenue. Interest in sheep raising has grown, too, because of the ability of sheep to make good returns under drought and other difficult conditions. Sheep and lambs numbered 1,360,400 in the Prairie Provinces in 1934 as compared with 1,237,100 in 1933. Increases were recorded in each of the three provinces. As in the case of cattle, pure bred animals are on the increase.

Swine:- Swine are increasing more rapidly on western farms than all other forms of live stock (see table II). The obvious explanation is that in most sections of the West the raising of hogs pays better than either cattle or sheep owing to the fact that a greater amount of meat is produced by hogs from a given quantity of feed. The increase in pork production has gone hand in hand with the growth of dairy products and from the standpoint of land utilization signifies a distinct trend towards the more economical employment of that basic natural resource. The shift from beef and mutton production to swine and dairying in western Canada has come more rapidly than might be expected from the relation between land and population because of the large proportion of central and eastern European immigrants in the

population. These immigrants go in for hog raising much more generally than do native Canadian farmers or settlers from the United States or the British Isles.

Swine in the prairie region numbered 200,375 in 1901. By 1931 they had increased to 2,391,226, of which 390,043 were in Manitoba, 949,055 in Saskatchewan and 1,052,158 in Alberta. Small declines occurred in succeeding years, the drought areas being a depressing factor. Liquidation of hogs in certain areas because of feed shortage was especially heavy in the autumn of 1934.

Hog prices in Canada were extremely low in 1932. The collapse of grain prices had resulted in an increase in hog production as an outlet for almost worthless grain and the domestic market was unable to absorb the overload. The British Quota system and the Ottawa Agreements which went into force late in 1932 opened a market for Canadian hog products. Prices rose steadily and in 1934 were at about twice the 1932 level. Exports of bacon amounted to 35,820,400 pounds in 1932; to 73,297,200 pounds in 1933, and to 120,420,200 pounds in 1934. As the latter figure represents less than one-half the annual quota of 280,000,000 pounds accorded Canadian bacon until 1937 in the British market, opportunity for continued expansion is assured.

Poultry and Eggs:- Western Canada raises almost 40 p.c. of the poultry of the Dominion. All classes of poultry in the Prairie Provinces, which in 1901 amounted to 1,717,019, totalled 25,347,830 in 1931, declined to 22,769,500 in 1933, and advanced to 23,032,800 in 1934. Hens and chickens comprised approximately 90 p.c. of the total in 1934.

Canadian poultry is achieving increasing popularity in Great Britain both for quality and standardization of pack. Canada initiated exports of chilled turkeys to the British market in 1932, the volume increased in 1933 and was again heavy in 1934. The export movement of chickens to Great Britain during 1934 received considerable impetus from the imposition by Great Britain of a three pence tariff on foreign chickens. The opportunity for increasing the export trade in market poultry to the United Kingdom stands second to bacon only.

Egg production in the Prairie Provinces has increased with minor set backs from about 7,000,000 dozen in 1900 to over 76,800,000 in 1932. A decline to 68,100,000 occurred in 1933.

In 1933 Canada enjoyed a revival of her export trade to Great Britain, approximately 1 3/4 million dozen being exported. Exports were substantial in 1934 although somewhat below the level of 1933. Higher costs of eggs stored in Canada accompanied by somewhat lower prices in England and a less advantageous exchange rate were responsible for the reduction. Canada appears, however, to have definitely reopened her export trade with Great Britain in this commodity.

Milk:- Milk production in the prairie region has grown steadily from 1910 to the present with only occasional set backs. Production per head of population amounted to 1,415 pounds in 1910 and to 1,613 in 1933. The total milk production of the three provinces in 1933 amounted to 3,919,727,000 pounds, of which Saskatchewan contributed 37 p.c., Alberta 34 p.c., and Manitoba 29 p.c. (For further details see tables 14 and 15).

Since over 60 p.c. of the population lives in rural parts, much of the milk is consumed locally on the farm. Sale of cream, however, is considerable, part of which finds its way to the consumer in that form and part as creamery butter. Very little milk is made into cheese in the prairie region. Of the portion consumed on the farm, much is converted into butter, the skim milk and whey being fed to stock.

Owing to the frequent shortages of moisture in the prairie region there are greater fluctuations in the annual output of milk than in other parts of Canada. Nevertheless, milk production fluctuates much less violently than cereal crops and while its growth has been slower it is a dependable source of income.

Milk production in the Prairie Provinces in 1933 was 20 p.c. greater than in 1930 and a somewhat higher production is indicated for 1934. The increase, despite adverse feed and pasture conditions, has been due to the increase in the number of dairy cows. Relatively lower returns from beef production together with crop failures and low grain prices have caused farmers in the West to produce more milk whenever possible.

TABLE 14.--Production of Milk, Dairy Butter, Home-made Cheese, Wool and Eggs
in the Prairie Provinces and Canada, 1900-33.
"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Total Milk	1910	543,890	662,093	526,472	1,732,455	9,806,741
	1915	682,524	982,401	747,324	2,412,249	-
	1920	604,683	962,232	784,407	2,351,322	10,976,235
	1925	900,222	1,435,774	1,156,868	3,492,864	-
	1930	932,996	1,254,446	1,076,979	3,264,421	15,126,459
	1931	1,062,518	1,403,435	1,329,124	3,795,077	15,772,852
	1932	1,015,038	1,399,161	1,311,856	3,726,055	15,917,868
	1933	1,116,507	1,456,818	1,346,402	3,919,727	16,024,831
Dairy Butter	1900	8,677	2,298	1,239	12,214	105,343
	1910	10,938	12,053	7,689	30,680	137,110
	1915	11,967	25,080	11,484	48,531	-
	1920	8,371	15,833	9,172	33,376	103,488
	1925	9,758	19,342	10,037	39,137	-
	1930	9,248	20,974	11,852	42,074	97,529
	1931	8,500	21,200	11,900	41,600	103,310
	1932	9,245	21,500	12,500	43,245	106,936
	1933	9,225	21,500	12,500	43,225	106,485
Home-made Cheese	1910	328	28	142	498	1,371
	1915	227	155	47	429	-
	1920	112	22	41	175	534
	1925	94	61	140	295	-
	1930	167	117	133	417	813
	1931	164	130	169	463	901
	1932	165	140	250	555	1,027
	1933	100	140	250	490	943
Wool	1900	137	422	204	763	10,658
	1910	94	328	298	720	6,934
	1915	240	368	729	1,337	-
	1920	490	744	1,756	2,990	11,338
	1925	348	576	1,749	2,673	-
	1930	1,268	1,211	3,116	5,595	21,016
	1931	1,202	1,605	4,554	7,361	20,365
	1932	947	1,855	4,865	7,667	20,518
	1933	1,048	2,057	3,988	7,093	19,206
		Doz.	Doz.	Doz.	Doz.	Doz.
Eggs	1900	5,038	1,233	965	7,236	84,133
	1910	9,647	11,437	7,014	28,098	123,071
	1915	12,645	23,108	14,163	49,916	-
	1920	9,765	19,565	12,613	41,943	144,475
	1925	13,201	24,644	17,122	54,967	-
	1932	35,192	26,437	15,188	76,817	229,461
	1933 *	34,240	23,292	10,571	68,103	210,585

* Subject to revision.

TABLE 15.--Value of Milk, Dairy Butter, Home-made Cheese, Wool and Eggs
in the Prairie Provinces and Canada, 1900-33.

"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		\$	\$	\$	\$	\$
Milk	1900	2,793	730	546	4,069	66,471
	1910	6,662	7,246	7,954	21,862	103,382
	1915	13,377	23,062	15,896	52,335	-
	1920	10,772	17,061	14,452	42,285	232,408
	1925	10,685	15,456	13,056	39,197	-
	1930	12,973	16,855	18,049	47,877	237,068
	1931	11,198	13,665	15,764	40,627	191,389
	1932	8,751	11,186	11,859	31,796	150,074
	1933	10,796	12,313	12,723	35,832	167,488
Dairy Butter	1910	2,571	2,750	1,826	7,147	30,269
	1915	2,877	4,775	2,819	10,471	-
	1920	3,853	6,815	3,966	14,634	50,181
	1925	2,818	5,386	3,004	11,208	-
	1930	2,314	4,944	3,054	10,312	27,385
	1931	1,275	3,180	1,845	6,300	21,450
	1932	1,109	2,580	1,588	5,277	15,311
	1933	1,292	2,795	1,687	5,774	16,623
Home-made Cheese	1910	33	3	19	55	154
	1915	37	33	8	78	-
	1920	20	6	10	36	123
	1925	10	11	19	40	-
	1930	20	17	17	54	115
	1931	22	16	17	55	108
	1932	15	14	22	51	94
	1933	10	15	23	48	94
Wool	1900	15	39	31	85	1,887
	1910	15	60	42	117	1,602
	1915	79	98	199	376	-
	1920	80	154	417	651	3,380
	1925	71	137	453	661	-
	1930	120	108	250	478	2,311
	1931	60	80	228	368	1,644
	1932	28	74	195	297	1,094
	1933	84	206	359	649	2,000
Eggs	1900	606	159	168	933	10,287
	1910	1,763	2,249	1,516	5,528	23,271
	1915	2,765	4,486	3,157	10,408	-
	1920	4,122	7,477	4,986	16,585	65,294
	1925	3,203	5,506	3,924	12,633	-
	1932	2,950	2,276	2,022	7,248	29,830
	1933*	2,397	1,630	1,797	5,824	26,345
	1932	-	4,251	2,000	-	12,330
	1933	-	1,200	1,100	-	4,100

*Subject to revision.

Butter and Cheese:- Butter production in the prairie region, which in 1900 amounted to 12,000,000 pounds, totalled almost 106,000,000 pounds in 1933 indicating almost a nine fold expansion in 33 years. The history of the older provinces is being repeated in the trend from farm to factory production. In 1915 only 25 p.c. of the butter produced in the West was made in factories; by 1933 the proportion was almost 60 p.c. Approximately 75 p.c. of the butter produced on farms in the prairie region is consumed locally.

Production of creamery butter in the Prairie Provinces represents almost 30 p.c. of the Canadian total. It increased 6.9 p.c. in 1933 over the preceding year and a percentage increase of around 8.5 is indicated for 1934.

Cheese production in western Canada is small, amounting to about 2 1/2 p.c. of the Canadian total. About 90 p.c. is factory-made. Like butter its production expanded rapidly up to 1926 when the upward trend was interrupted. With the drastic declines in grain prices since 1929 another period of rapid expansion in dairy products ensued. Factory cheese production in the Prairie Provinces amounted to 1,347,682 pounds in 1928, to 1,680,543 pounds in 1930 and to 2,873,322 pounds in 1933. Alberta produces over half the cheese in the region. Cheese production in Canada, as a whole, in 1933 was less than in any year since about 1890.

Although the exports of Canadian dairy products are only a very small proportion of the total production, the situation in the United Kingdom market in regard to imports of butter and cheese is of particular interest since that market constitutes the chief outlet for surplus Canadian dairy products, especially cheese. The trade in butter is very limited. Exports of Canadian cheese to all countries in 1933 amounted to 74,168,600 pounds, of which 70,707,600 went to the United Kingdom. In 1934 exports to all countries amounted to slightly over 61,000,000 pounds, of which slightly more than 58,000,000 pounds went to the United Kingdom. Exports of butter from Canada in 1933 amounted to 4,437,200 pounds, of which 3,718,500 pounds went to the United Kingdom. Similar figures for 1934 were 428,300 and 400 respectively. Under the Imperial Economic Conference agreements of 1932 dairy produce is allowed unrestricted entry into the United Kingdom until November 15, 1935.

TABLE 16.--Creamery Butter.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
	<u>Quantity</u>				
1918	8,436,962	5,009,014	9,053,237	22,499,213	93,298,348
1919	8,268,342	6,622,572	11,822,890	26,713,804	103,890,707
1920	7,578,549	6,638,656	11,821,291	26,038,496	111,691,718
1921	8,541,095	7,030,053	13,048,493	28,619,641	128,744,610
1922	10,559,601	8,901,144	15,417,070	34,877,815	152,501,900
1923	10,730,060	10,867,010	17,868,853	39,465,923	162,834,608
1924	12,632,814	13,543,001	22,339,857	48,515,672	178,893,937
1925	13,663,312	15,946,233	19,630,101	49,239,646	169,494,967
1926	15,418,630	16,629,136	19,912,466	51,960,232	177,209,287
1927	14,231,026	11,995,531	16,179,712	42,406,269	176,978,947
1928	13,782,167	11,310,496	14,375,636	39,468,299	168,027,039
1929	15,472,109	14,786,205	16,004,463	46,262,777	170,810,230
1930	15,786,896	13,920,561	17,716,744	47,424,201	185,751,061
1931	21,078,073	18,960,352	22,957,922	62,996,347	225,955,246
1932	19,299,877	17,860,895	21,016,048	58,176,820	214,002,127
1933	19,557,688	19,318,542	23,852,350	62,728,580	219,232,546
	<u>Value</u>				
	\$	\$	\$	\$	\$
1918	3,897,476	2,221,403	4,025,851	12,674,388	41,859,156
1919	4,350,693	3,495,172	6,132,733	13,978,598	56,371,985
1920	4,282,731	3,727,140	6,555,509	12,035,722	63,625,203
1921	3,253,057	2,552,698	4,543,007	10,348,762	48,135,439
1922	3,603,491	3,066,573	5,126,844	11,796,908	53,453,282
1923	3,662,444	3,632,377	5,891,186	13,186,007	56,873,510
1924	4,160,707	4,378,106	7,059,630	15,598,443	60,494,826
1925	4,909,958	5,855,979	6,959,059	17,724,996	63,008,097
1926	5,171,138	5,515,349	6,568,280	17,254,767	61,753,390
1927	5,125,585	4,354,734	5,765,348	15,245,667	65,709,986
1928	5,139,387	4,370,623	5,374,456	14,884,466	64,702,538
1929	5,724,640	5,541,444	5,825,248	17,091,352	65,929,782
1930	4,666,746	4,307,967	4,968,227	13,942,940	56,670,504
1931	4,370,195	4,025,100	4,711,231	13,106,526	50,198,878
1932	3,329,500	3,073,997	3,512,685	9,916,182	40,475,479
1933	3,612,069	3,492,117	4,308,962	11,413,148	43,546,109

TABLE 17.--Factory Cheese

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
	<u>Quantity</u>				
1918	657,585	13,573	552,834	1,223,992	174,878,313
1919	423,856	35,452	520,530	979,837	166,421,871
1920	116,229	28,367	398,750	543,346	149,201,856
1921	255,829	22,659	930,660	1,209,148	162,117,494
1922	102,354	12,448	931,992	1,046,794	135,821,116
1923	231,530	118,920	1,865,608	2,216,058	151,624,376
1924	596,237	138,631	1,714,790	2,449,658	149,707,530
1925	765,407	255,010	1,473,835	2,494,252	177,139,113
1926	863,658	378,176	1,449,983	2,691,817	171,731,631
1927	635,172	269,048	848,511	1,752,731	138,056,908
1928	477,419	148,215	722,048	1,347,682	144,584,619
1929	500,426	142,024	1,001,475	1,643,925	118,746,286
1930	504,490	140,701	1,035,352	1,680,543	119,105,203
1931	454,351	320,305	1,040,588	1,815,244	113,956,639
1932	533,663	541,241	1,439,715	2,514,619	120,524,243
1933	677,864	758,071	1,437,387	2,873,322	111,146,493
	<u>Value</u>				
	\$	\$	\$	\$	\$
1918	143,821	3,257	130,911	277,989	39,456,532
1919	111,898	11,527	145,158	268,583	44,586,168
1920	31,611	7,790	110,355	149,756	39,100,872
1921	47,341	4,209	200,478	252,028	28,710,030
1922	16,747	2,026	183,860	202,633	21,824,760
1923	47,191	22,061	368,771	438,023	28,645,192
1924	101,887	24,199	278,478	404,564	24,201,923
1925	150,171	52,909	306,605	509,685	36,571,556
1926	161,126	69,085	275,107	505,318	28,807,841
1927	139,463	52,337	170,689	362,489	25,522,148
1928	104,884	32,567	158,404	295,855	30,494,463
1929	106,351	30,091	198,047	334,489	21,471,330
1930	86,614	23,383	175,392	285,389	18,089,870
1931	61,324	39,200	118,390	218,914	12,824,695
1932	53,128	58,061	146,177	257,366	11,379,922
1933	71,000	89,870	149,594	310,464	11,127,984

PART 3.--MINING

For many years the potential possibilities of the Prairies were regarded as almost solely agricultural. From the standpoint of a more balanced growth the recent development of mineral and other assets is of great importance. Until a relatively short time ago, coal, natural gas, stone and other structural materials were the only minerals of any importance produced in the Prairie Provinces. With the development of this vast western territory, the scene has gradually changed and other minerals have become of such economic importance that to-day mining ranks third among the different branches of production.

The earliest mineral industry in Manitoba was the extraction of salt from the brine springs on the west side of Lake Manitoba and Lake Winnipegosis. As Winnipeg grew, demand for building stone increased and the Tyndall limestone of the province is now used in the construction of many imposing Canadian buildings. Gypsum deposits were opened up northwest of Lake St. Martin in the late nineties. Brick making was carried on in several towns as the demand grew and Portland cement manufacture was established. Of late years other minerals have become important. The Hudson

Bay Smelter came into production late in 1930 and smelted ore from the Flin Flon mine, producing blister copper and refined zinc. The Sherritt Gordon mine began shipping to this smelter early in 1931.^x The copper-zinc ores of these mines carry small values in gold, but when large tonnages are treated this output of gold as a by-product is considerable. Gold has been found in over widely scattered sections. The chief gold mines at present are Central Manitoba and San Antonio.

In Saskatchewan there is each year an appreciable production of lignite coal, clays and clay products, sand and gravel, sodium sulphate and occasionally other mineral products. Large clay deposits both of fireclay and of clay suitable for the manufacture of pottery, occur south of Moose Jaw. The year 1932 was the first in which a metal production for Saskatchewan was shown in the official statistics, gold and silver being reported as contained in ores shipped from properties located in the northern part of the province. As the ore body of the Flin Flon mine lies across the Manitoba-Saskatchewan boundary, part of its production must be credited to Saskatchewan. Large areas of Precambrian rocks, as yet but little prospected, exist in the northern parts of both Manitoba and Saskatchewan. Sodium sulphate occurs as lakes which are solid at certain seasons and mushy or even liquid at others. Shipments of this material are now being made to the industrial centres of eastern Canada and are replacing the manufactured product formerly imported. Development of the lignite deposits has progressed to a greater extent in Saskatchewan than the production of any other mineral. Most of the mines are operated on a small scale largely to meet the needs of the surrounding country and many of them are worked only in the winter months as the owners find it more profitable to grow wheat than to mine coal during the summer season.

Alberta is yet for the most part a grazing and wheat-growing country, but the coal mines which are located in the area immediately to the east of the mountains contribute largely to the mineral production of Canada. Coal accounts for 60 p.c. of the mineral production of the province. Of the 535 coal mines operating in Canada in 1933, 332 were in Alberta and 106 in Saskatchewan. The total capital employed was \$125,740,790, of which \$43,855,880 was invested in Alberta. The fuel situation of Canada is somewhat anomalous, as in spite of the enormous resources of coal in the country about 50 p.c. of the consumption is imported from the United States. The central provinces are more economically supplied with coal from the nearer coal fields of Pennsylvania and Ohio than from the western provinces or Nova Scotia. The anomaly of the situation is accentuated if we consider that Canada's present coal consumption is about 23,000,000 tons annually as against reserves of 1,234,269,000,000 metric tons, sufficient for an unthinkable long period at the present rate of consumption. Of the above reserves Alberta contributes almost 87 p.c. Thus its importance is evident, providing economical transportation to where the coal is needed is possible.[†] Natural gas is also of considerable importance in Alberta as a fuel for domestic and industrial purposes. Prospecting for oil has been carried on in many fields and considerable success attained, especially in the Turner valley. The complex geology of the region, however, and the depth to which it is necessary to drill, make extensive preparatory drill testing necessary. Deposits of bituminous sands in the northern part of the province along the Athabaska river have become of economic importance in recent years.

The historical record of the mineral production of the Prairie Provinces with comparative figures for all Canada is presented in table 1. Tables 2, 3 and 4 show in detail the mineral production of each province during years 1929-33. Table 5 shows the principal statistics of the mineral industry and table 6 the production record of certain important minerals.

^xOwing to the prevailing low prices for base metals, Sherritt Gordon was closed down in 1932.

[†]A review of Government assistance to facilitate the eastward movement of Western Canadian coal is given in an appendix to this chapter.

TABLE 1.--Mineral Production, Prairie Provinces and Canada, 1900-33.
"000" omitted

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	\$	\$	\$	\$	\$
1900	-	-	-	23,452	64,421
1905	-	-	-	11,388	69,079
1910	1,500	498	8,996	10,894	106,823
1915	1,318	452	9,909	11,679	137,109
1920	4,223	1,837	33,586	39,646	227,860
1921	1,934	1,114	30,562	33,610	171,923
1922	2,259	1,255	27,872	31,386	184,297
1923	1,768	1,048	31,288	34,104	214,079
1924	1,534	1,128	22,345	25,007	209,583
1925	2,277	1,076	25,319	28,672	226,583
1926	3,074	1,193	26,977	31,144	240,437
1927	2,889	1,455	29,309	33,653	247,357
1928	4,187	1,719	32,531	38,437	274,989
1929	5,424	2,254	34,740	42,418	310,850
1930	5,453	2,369	30,428	38,250	279,874
1931	9,966	1,932	23,581	35,479	228,029
1932	9,058	1,682	21,174	31,914	191,228
1933	9,027	2,477	19,703	31,207	221,483

TABLE 2.--Mineral Production of Manitoba, 1930-33.

Product	1930		1931		1932		1933	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$		\$
Metallics -								
Copper lb.	2,087,609	215,018	45,821,432	3,835,254	52,706,861	3,362,803	38,163,181	2,844,989
Gold fine oz.	23,189	479,359	102,969	2,128,558	122,507	2,532,444	125,310	2,590,388
						343,906x		993,478x
Selenium lb.	-	-	3,870	7,353	-	-	-	-
Silver fine oz.	94,653	36,114	836,547	249,877	1,036,497	328,275	1,101,578	416,758
Zinc lb.	3,882,141	139,757	35,173,749	898,338	41,736,600	1,004,016	43,516,037	1,397,082
Non-Metallics -								
Coal tons	-	-	1,306	3,797	1,552	3,684	3,880	9,214
Gypsum tons	34,157	298,297	23,076	231,124	12,719	113,739	6,830	65,471
Natural gas M cu.ft.	600	180	600	180	600	180	600	180
Quartz tons	-	-	67,214	76,624	87,253	102,493	7,736	23,507
Salt tons	-	-	-	-	508	7,092	1,499	18,388
Feldspar tons	-	-	-	-	-	-	88	484
Clay Products and Other								
Structural Materials -								
Cement bris.	977,906	2,268,742	544,160	1,267,893	242,112	549,594	129,540	295,351
Clay products	-	215,967	-	122,628	-	49,773	-	20,966
Lime tons	24,098	260,325	21,014	207,401	18,235	172,110	18,032	167,640
Sand and gravel ..	1,253,103	453,944	871,986	294,178	440,309	188,974	288,214	108,828
Stone tons	147,078	1,085,479	153,248	642,649	78,423	299,282	33,190	74,227
TOTAL	-	5,453,182	-	9,965,854	-	9,058,365	-	9,026,951

*Estimated exchange equalization.

TABLE 3.--Mineral Production of Saskatchewan, 1930-33.

Product	1930		1931		1932		1933	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$		\$
Metallics -								
Gold fine oz.	-	-	-	-	11	227	5,400	111,628
						31x		42,812x
Silver fine oz.	-	-	-	-	14	4	114,604	43,350
Copper lb.	-	-	-	-	-	-	3,223,941	240,330
Zinc lb.	-	-	-	-	-	-	2,789,683	89,563
Non-Metallics -								
Coal tons	579,424	968,863	662,836	945,259	887,139	1,229,449	927,649	1,285,996
Sodium sulphate tons	-	293,847	-	421,097	-	271,736	-	485,416
Volcanic dust tons	242	4,840	128	2,560	180	3,600	118	2,360
Quartz tons	-	-	-	-	-	-	59,506	59,506
Salt tons	-	-	-	-	-	-	231	4,510
Clay Products and Other Structural Materials -								
Clay products tons	-	349,283	-	166,257	-	109,739	-	92,207
Sand and gravel tons	3,680,553	751,779	1,388,594	396,707	362,841	66,942	104,400	19,731
TOTAL	-	2,368,612	-	1,931,880	-	1,681,728	-	2,477,425

TABLE 4.--Mineral Production of Alberta, 1930-33.

Product	1930		1931		1932		1933	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$		\$
Metallics -								
Gold fine oz.	-	-	195	4,031	83	1,716	324	6,698
						233x		2,569x
Silver fine oz.	-	-	29	9	9	3	32	12
Non-Metallics -								
Bituminous sands .. tons	2,067	8,268	1,015	4,060	343	1,372	466	1,662
Coal tons	5,755,528	18,063,225	4,564,015	13,342,675	4,870,648	13,526,309	4,718,788	12,307,258
Natural gas M cu.ft.	20,748,583	4,929,226	17,798,698	4,067,893	15,370,968	3,853,794	15,352,811	3,886,263
Petroleum brls.	1,398,160	4,780,696	1,413,631	3,976,220	906,751	2,751,541	995,832	2,844,157
Clay Products and Other Structural Materials -								
Cement brls.	525,289	1,144,160	626,483	1,286,080	193,571	399,922	149,206	299,530
Clay products tons	-	997,685	-	529,716	-	329,584	-	198,373
Lime tons	5,136	49,525	5,118	46,785	6,642	56,577	7,501	62,037
Sand and gravel ... tons	1,626,589	433,221	1,050,988	313,616	734,067	250,025	281,122	85,577
Stone tons	7,903	21,736	2,496	9,642	1,428	2,985	1,550	8,817
TOTAL	-	30,427,742	-	23,580,727	-	21,174,061	-	19,702,953

^x Estimated exchange equalization.

TABLE 5.--Principal Statistics of the Mineral Industry, Prairie Provinces and Canada, 1922-33.

Year	Number of Active Operators	Number of Operating Plants or Mines	Capital Employed	Number of Employees	Salaries and Wages	Cost of Fuel and Electricity	Net Value of Bullion, Ore, Concentrates, Residues and other Minerals Shipped from the Mines, Smelters, Brick and Cement Plants and Quarries
			\$		\$	\$	\$
<u>Manitoba</u>							
1922	32	33	5,714,508	638	651,585	347,980	2,257,843
1923	29	30	5,776,757	629	680,183	328,521	1,767,811
1924	24	25	7,973,261	541	612,891	268,250	1,534,193
1925	25	26	4,948,621	699	711,735	315,005	2,275,772
1926	31	32	10,636,439	780	911,424	442,993	3,069,571
1927	32	33	11,780,120	1,007	1,232,805	590,225	2,888,895
1928	40	41	15,755,174	1,625	1,926,264	631,430	4,183,342
1929	43	51	18,020,285	1,819	2,375,990	992,386	5,423,628
1930	50	135	35,812,839	3,021	4,372,044	1,205,288	5,665,008
1931	51	107	39,113,921	2,059	3,096,332	796,076	15,122,432
1932	-	133	21,349,000	1,730	2,106,017	479,993	11,396,818
1933	-	120	30,130,497	1,379	1,847,251	234,202	8,433,130
<u>Saskatchewan</u>							
1922	71	71	4,202,597	587	577,117	38,170	1,255,470
1923	78	78	4,747,582	738	760,392	65,274	1,027,971
1924	81	81	4,157,426	678	669,000	65,641	1,107,498
1925	68	68	3,732,909	652	647,014	91,025	1,055,139
1926	73	74	5,119,845	742	708,612	111,661	1,175,139
1927	72	72	5,089,410	1,112	855,704	110,961	1,432,739
1928	77	124	5,647,447	1,229	942,150	140,577	1,686,136
1929	72	126	6,097,476	1,421	1,139,373	173,677	2,211,708
1930	73	144	6,424,080	1,371	1,040,790	229,760	2,333,280
1931	76	111	7,136,859	1,092	896,131	222,526	1,876,284
1932	-	115	6,013,271	924	748,782	152,433	1,626,307
1933	-	134	12,368,385	1,265	1,111,001	238,898	2,614,337
<u>Alberta</u>							
1922	306	357	65,918,600	10,343	16,131,521	734,678	27,872,136
1923	391	444	70,843,708	11,295	19,306,818	1,004,017	30,677,192
1924	387	446	87,003,765	8,716	13,684,225	991,549	21,750,278
1925	390	465	86,735,632	10,486	13,808,354	1,226,903	24,695,870
1926	425	473	102,875,177	10,733	14,499,210	1,380,096	26,351,728
1927	376	461	105,203,514	11,205	15,699,304	1,154,548	28,621,537
1928	362	490	118,556,978	12,358	18,022,037	1,386,358	31,569,442
1929	396	558	142,942,397	13,824	19,915,537	1,476,468	33,883,239
1930	418	562	149,974,382	12,675	16,272,916	1,407,136	29,933,896
1931	401	553	141,629,189	10,579	11,357,722	1,198,890	23,621,495
1932	-	567	124,484,909	9,692	10,476,449	804,137	20,701,075
1933	-	575	112,666,472	9,057	9,463,382	805,577	18,945,255

TABLE 5.--Principal Statistics of the Mineral Industry, Prairie Provinces and Canada, 1922-33 - Cont'd.

Year	Number of Active Operators	Number of Operating Plants or Mines	Capital Employed	Number of Employees	Salaries and Wages	Cost of Fuel and Electricity	Net Value of Bullion, Ore, Concentrates, Residues and other Minerals Shipped from the Mines, Smelters, Brick and Cement Plants and Quarries
			\$		\$	\$	\$
				Canada			
1922	1,944	6,654	493,694,823	62,249	75,026,501	11,096,564	182,858,578
1923	2,295	8,150	578,837,012	66,952	91,334,877	21,257,336	194,850,548
1924	2,214	7,840	632,443,946	64,328	82,787,421	19,587,452	190,845,547
1925	2,351	8,553	632,075,145	65,090	85,103,118	20,565,800	212,531,129
1926	2,427	9,347	688,750,008	77,931	94,216,813	23,518,304	237,550,938
1927	2,350	9,177	714,073,000	84,674	104,220,892	22,960,284	251,077,661
1928	2,345	9,036	841,967,982	89,448	115,954,022	23,432,001	279,820,914
1929	2,386	9,148	867,021,033	95,102	124,490,511	26,751,585	315,181,388
1930	2,478	9,105	887,420,859	89,200	113,975,332	25,066,193	270,785,513
1931	2,397	9,578	842,060,020	72,809	91,969,299	21,509,348	238,170,019
1932	2,421	10,380	685,211,573	61,470	71,772,049	16,476,484	196,578,211
1933	2,553	10,873	810,355,705	63,334	70,031,805	14,024,904	221,754,818

TABLE 6.--Historical - Principal Mineral Products of the Prairie Provinces.

(Representative figures illustrating the trend of production of the more important minerals of the Prairie Provinces).

	Manitoba		Saskatchewan		Alberta		Manitoba		Alberta	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	COAL ^x						NATURAL GAS			
	Tons	\$	Tons	\$	Tons	\$	M.cu.ft.	\$	M.cu.ft.	\$
1900	-	-	40,500	60,750	311,450	778,625	-	-	-	-
1905	-	-	107,596	152,334	931,917	1,993,915	-	-	-	-
1910	-	-	181,156	293,929	2,894,469	7,065,736	-	-	-	75,168
1915	-	-	240,107	365,246	3,360,818	8,283,079	-	-	4,481,947	1,022,814
1920	-	-	335,222	797,828	6,907,765	30,186,933	200	60	5,633,442	1,181,349
1921	-	-	335,632	823,180	5,909,217	27,246,514	200	60	4,945,884	1,374,599
1922	-	-	382,437	802,053	5,990,911	24,351,913	200	60	5,867,459	1,622,109
1923	-	-	438,100	858,448	6,854,397	28,018,303	200	60	7,191,670	1,692,246
1924	-	-	479,118	886,668	5,189,729	18,884,318	200	60	7,131,086	1,796,610
1925	-	-	471,965	870,875	5,869,031	20,021,484	200	60	9,119,500	2,752,500
1926	-	-	439,803	819,805	6,503,705	20,886,103	200	60	10,794,697	3,019,221
1927	-	-	470,216	868,867	6,934,162	21,982,058	200	60	13,434,621	3,586,532
1928	-	-	471,713	831,491	7,336,330	23,532,414	200	60	14,288,605	3,754,466
1929	-	-	580,189	993,229	7,150,693	22,928,182	600	180	19,112,931	4,684,247
1930	-	-	579,424	968,863	5,755,528	18,063,225	600	180	20,748,583	4,929,226
1931	1,306	3,797	662,836	945,259	4,564,015	13,342,675	600	180	17,798,698	4,067,893
1932	1,552	3,684	887,139	1,229,449	4,870,648	13,526,309	600	180	15,370,968	3,853,794
1933	3,880	9,214	927,649	1,285,996	4,718,788	12,307,258	600	180	15,352,811	3,886,263

NOTES: -^xFor the years 1920-33 the tonnage shown is the total output from all mines; for previous years the figures given include only sales, colliery consumption and coal used by operators.

TABLE 6.--Historical - Principal Mineral Products of the Prairie Provinces - Cont'd.

	Manitoba		Alberta		Alberta	
	Quantity	Value	Quantity	Value	Quantity	Value
	CEMENT				CRUDE PETROLEUM	
	Barrels	\$	Barrels	\$	Barrels	\$
1910	18,561	21,995	323,009	774,473	-	-
1915	339,554	625,369	233,648	415,009	-	-
1920	747,640	1,770,738	517,114	1,197,416	11,032	75,986
1921	336,983	894,210	312,916	735,164	7,203	49,313
1922	429,352	1,126,137	358,209	838,208	5,608	52,128
1923	320,218	817,664	318,756	740,940	1,943	8,227
1924	286,948	746,750	416,534	945,700	844	4,135
1925	407,395	1,037,929	395,857	913,529	183,491	845,394
1926	612,155	1,572,401	423,766	873,621	216,050	902,504
1927	551,698	1,378,121	601,699	1,303,880	318,741	1,185,948
1928	693,450	1,685,084	834,067	1,732,582	482,047	1,764,172
1929	1,000,258	2,350,606	808,796	1,770,786	988,675	3,458,177
1930	977,906	2,268,742	525,289	1,144,160	1,398,160	4,780,696
1931	544,160	1,267,893	626,483	1,286,080	1,413,631	3,976,220
1932	242,112	549,594	193,571	399,922	906,751	2,751,541
1933	129,540	295,351	149,206	299,530	995,832	2,844,157

	Manitoba		Manitoba		Alberta	
	Quantity	Value	Quantity	Value	Quantity	Value
	GYPSUM				STONE	
	Tons	\$	Tons	\$	Tons	\$
1905	4,500	31,500	-	-	-	-
1910	19,500	195,000	-	-	-	-
1915	20,278	139,721	-	153,464	-	890
1920	44,371	487,894	-	374,286	-	4,415
1921	40,859	480,282	16,868	56,666	2,962	13,750
1922	34,072	440,914	34,359	106,638	554	7,300
1923	31,575	386,554	51,304	118,277	-	-
1924	29,375	348,212	54,065	93,876	16,698	19,317
1925	35,088	417,868	52,770	188,496	3,979	6,868
1926	35,172	461,461	101,571	357,884	3,759	13,890
1927	39,895	512,008	154,666	318,556	3,367	7,830
1928	51,285	609,039	235,864	608,217	5,010	24,740
1929	67,269	631,051	192,109	895,017	5,183	24,546
1930	34,157	298,297	147,078	1,085,479	7,903	21,736
1931	23,076	231,124	153,248	642,649	2,496	9,642
1932	12,719	113,739	78,423	299,282	1,428	2,985
1933	6,830	65,471	33,190	74,227	1,550	8,817

TABLE 6.—Historical — Principal Mineral Products of the Prairie Provinces — Cont'd.

	Manitoba		Saskatchewan		Alberta	
	Quantity	Value	Quantity	Value	Quantity	Value
	Tons	\$	Tons	\$	Tons	\$
1921	709,994	153,243	782,121	105,036	1,756,053	383,067
1922	780,231	207,415	924,944	306,733	1,139,961	229,091
1923	595,549	123,478	438,319	59,541	888,216	199,256
1924	359,535	81,897	702,713	97,045	615,594	115,967
1925	727,152	196,601	579,901	88,805	534,892	107,436
1926	989,580	178,059	863,901	145,296	1,754,965	412,430
1927	1,333,580	228,655	1,517,801	263,100	1,392,752	293,674
1928	1,653,929	262,006	2,225,524	431,475	2,575,708	489,406
1929	1,782,085	322,430	3,496,679	687,646	1,721,930	447,993
1930	1,253,103	453,944	3,680,553	751,779	1,626,989	433,221
1931	871,986	294,178	1,388,594	396,707	1,050,988	313,616
1932	440,309	188,974	362,841	66,942	734,067	250,025
1933	288,214	108,828	104,400	19,731	281,122	85,577

PART 4.—FORESTRY.

The Dominion of Canada may be roughly divided into three main drainage areas — the Pacific slope; the Great Plains region draining into the Arctic ocean and Hudson bay; and the St. Lawrence basin and Atlantic slope. Each of these regions supports a distinct type of forest growth.

The Great Plains region may be divided into the Prairie, Northern Forest and Sub-Arctic belts. There are no great variations in altitude in the region, and latitude and soil conditions, especially drainage, determine the distribution of forest types. The Prairie belt in southern Alberta, Saskatchewan and Manitoba extends north from the International Boundary for 200 to 400 miles. Patches of tree growth in protected situations are made up chiefly of aspen poplar, with some white spruce and jack pine. North of this purely agricultural and pastoral area is the great Northern Forest belt, from 300 to 400 miles wide, which extends from Alaska to Labrador, covering the greater part of the Laurentian Shield as far as the limits of commercial tree growth. Originally, white spruce predominated over this entire belt and it still forms the most important type commercially, although it has suffered severely through forest fires. In the East, balsam fir is an important associate, and the spruce-balsam fir type makes up most of the pulpwood resources of Eastern Canada. The black spruce type, frequently associated with eastern larch (tamarack), occupies poorly-drained areas within this belt. Enormous areas have been burned over by forest fires. Aspen poplar has replaced the spruce and balsam on the best soil in these areas, and is now the most prevalent species, although it will eventually be replaced by conifers where natural reproduction is possible. Over vast areas, however, there is no immediate prospect of securing a return to coniferous forest by natural agencies. Jack pine has taken possession of the drier, lighter soils, in some cases permanently. Paper birch comes in with aspen poplar toward the east, and balsam poplar occurs in the moister situations. Jack pine, aspen and balsam poplar reach a higher development along the Peace river in northern Alberta than they do elsewhere in America. Along its northern margin this belt merges into the sub-Arctic "tundra", with tree growth confined to narrow strips along waterways. Vigorous tree growth and fairly large timber are found along these shallow valleys as far north as 67°, indicating that soil conditions, especially drainage, are more important than climate in defining the limits of tree growth. To the northward, balsam fir disappears early from the forest growth, followed by balsam poplar, jack pine, aspen and paper birch, leaving white spruce, black spruce, tamarack or larch, and willow to define the northern limit of tree growth. This may be roughly indicated by a line drawn from the mouth of the Mackenzie river on the Arctic ocean to the mouth of the Churchill river on Hudson bay and across the Labrador peninsula at about 58° N. latitude.

The forest resources of the Prairie Provinces have been as yet little developed, forest products contributing, at the present time, only about 2 p.c. of the net production of these provinces.

Manitoba's forest area consists of 93,000 square miles, that of Saskatchewan 82,159 square miles and that of Alberta 126,769 square miles as compared with 373,500 square miles in Quebec and 1,153,005 square miles for all Canada. The estimated total accessible stand of timber of merchantable size in the Prairie Provinces amounts to over 19,067 million cubic feet as compared with 165,846 million cubic feet for all Canada. Little of this timber is found in the southern portions of the provinces, the spring wheat region being essentially a grass land plain with the absence of forest constituting one of its greatest attractions for agricultural settlers. The forests of the West lie to the north of the northern limit of existing agriculture. The sub-humid park or grove belt separates the great northern forest proper from the dry treeless portion of the prairies. The 1931 census shows approximately 9,421,000 acres of woodland on farms in the three provinces or 4.9 p.c. of the total forest area. The groves are composed almost entirely of aspen poplar with a scattering of white spruce and jack pine in certain areas. Such lumber and timber as are required for building and other construction are imported from adjacent provinces or brought in from the North.

The historical record of lumber production in the three provinces is shown in table 1. The preponderance of spruce is illustrated by table 2. The principal statistics of the lumber industry during the years 1921-33 are shown in table 3.

TABLE 1.—Lumber Production, Prairie Provinces and Canada, 1910-33.

Year	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	M.ft.b.m.	M.ft.b.m.	Quantity M.ft.b.m.	M.ft.b.m.	M.ft.b.m.
1910	42,922	75,931	45,127	163,980	4,451,652
1912	39,535	157,255	47,478	244,268	4,389,723
1914	44,658	56,677	45,236	146,571	3,946,254
1916	57,711	84,275	18,350	160,336	3,490,550
1918	54,047	75,835	22,388	152,270	3,886,631
1920	58,419	54,371	41,229	154,019	4,298,804
1921	61,729	10,892	26,002	98,623	2,869,307
1922	54,930	9,609	25,618	90,157	3,138,598
1923	73,382	11,674	32,724	117,780	3,728,445
1924	70,871	7,818	38,362	117,051	3,878,042
1925	89,403	16,477	41,766	147,646	3,888,920
1926	71,480	19,063	66,571	157,114	4,185,140
1927	72,116	23,002	98,507	193,625	4,098,081
1928	78,015	17,817	109,691	205,523	4,337,253
1929	78,591	35,245	134,659	248,495	4,741,941
1930	83,253	47,955	118,377	249,985	3,989,421
1931	29,654	18,416	50,999	99,069	2,497,553
1932	23,708	15,549	69,100	108,357	1,809,884
1933	33,112	17,639	65,247	115,998	1,957,989
	\$	\$	Value	\$	\$
1910	615,215	1,092,571	644,717	2,352,503	70,609,233
1912	545,356	2,535,611	745,868	3,826,835	69,475,784
1914	601,728	842,664	649,146	2,093,538	60,363,369
1916	850,879	1,189,551	263,996	2,304,226	58,365,349
1918	1,240,052	2,122,507	473,694	3,836,053	103,700,620
1920	2,058,590	2,074,621	1,480,186	5,613,397	168,171,987
1921	1,398,067	273,093	711,149	2,382,309	82,448,585
1922	1,371,062	283,922	649,791	2,304,775	84,554,172
1923	1,909,806	266,253	808,721	2,984,780	108,290,542
1924	1,783,289	162,968	859,560	2,805,817	104,444,622
1925	2,178,051	323,184	931,574	3,432,809	99,725,519
1926	1,724,307	432,443	1,464,487	3,621,237	101,071,260
1927	1,905,860	529,533	1,991,597	4,426,990	97,508,786
1928	1,898,605	411,246	2,376,209	4,686,060	103,590,035
1929	1,972,715	799,809	2,741,286	5,513,810	113,349,886
1930	1,689,947	1,001,583	2,223,794	4,915,324	87,710,957
1931	511,703	320,953	756,810	1,589,466	45,977,843
1932	296,500	257,993	915,895	1,470,188	26,881,924
1933	445,144	261,795	736,305	1,443,244	27,708,908

TABLE 2.-- Production of Spruce Lumber in the Prairie Provinces, 1910-33.

	Manitoba		Saskatchewan		Alberta	
	Quantity	Value	Quantity	Value	Quantity	Value
	M.ft.b.m.	\$	M.ft.b.m.	\$	M.ft.b.m.	\$
S P R U C E						
1910	35,398	505,742	74,639	1,073,947	38,171	556,498
1912	36,694	505,046	155,943	2,514,507	42,964	680,262
1914	40,639	543,886	55,682	828,162	39,895	572,100
1916	55,741	824,554	84,134	1,187,054	14,772	213,668
1918	50,220	1,154,847	75,501	2,115,694	19,800	423,174
1920	56,110	1,981,396	53,268	2,034,524	35,529	1,273,869
1921	60,423	1,369,884	10,346	259,455	23,114	628,795
1922	53,156	1,327,793	9,222	273,179	22,932	579,714
1923	75,542	1,892,489	10,473	237,025	27,675	693,267
1924	68,559	1,745,347	7,011	148,919	32,843	735,354
1925	85,690	2,107,984	16,046	315,109	35,112	799,549
1926	69,534	1,690,555	18,983	431,043	59,441	1,347,601
1927	70,051	1,873,528	22,625	522,200	85,642	1,758,382
1928	75,294	1,845,683	17,620	407,356	94,287	2,103,320
1929	72,756	1,869,605	33,797	770,729	124,191	2,563,568
1930	78,782	1,619,107	46,569	987,323	109,739	2,092,874
1931	28,110	490,525	18,416	320,953	46,152	685,919
1932	20,056	249,771	14,116	237,597	62,381	847,987
1933	28,631	396,520	15,341	231,252	60,458	688,762

TABLE 3.--Principal Statistics of the Lumber Industry, 1921-33.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Mills Reporting -	No.					
	1921	27	16	36	79	3,126
	1923	22	10	35	67	2,883
	1925	26	12	43	81	2,700
	1927	19	10	58	87	2,720
	1928	31	13	65	109	2,967
	1929	64	39	100	203	3,161
	1930	60	34	96	190	3,531
	1931	45	29	103	177	3,562
	1932	47	36	154	237	3,593
	1933	101	72	170	343	3,517
Capital Invested -	\$					
	1921	2,908,070	301,388	851,785	4,061,243	186,019,994
	1923	2,493,861	261,396	960,040	3,715,297	155,638,059
	1925	3,924,479	693,538	1,302,774	5,920,791	204,134,003
	1927	2,693,059	566,977	2,033,331	5,293,367	169,378,929
	1928	2,416,440	603,167	1,930,042	4,949,649	175,729,448
	1929	2,440,212	877,601	2,806,585	6,124,398	181,586,699
	1930	2,358,262	1,019,495	2,849,762	6,227,519	181,116,933
	1931	2,096,105	605,311	1,213,349	3,914,765	121,336,176
	1932	776,674	444,378	1,846,363	3,067,415	80,796,425
	1933	990,408	412,755	1,247,836	2,650,999	74,304,090
Employees -	No.					
	1921	416	116	226	758	30,336
	1923	440	133	419	992	35,070
	1925	563	219	468	1,250	35,457
	1927	645	493	1,161	2,299	44,598
	1928	731	362	1,237	2,330	44,862
	1929	864	757	1,628	3,249	46,466
	1930	779	562	1,447	2,788	43,457
	1931	282	185	512	979	22,361
	1932	196	259	724	1,179	18,285
	1933	297	329	739	1,365	17,779

TABLE 3.--Principal Statistics of the Lumber Industry, 1921-33 - Cont'd.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Salaries and wages - \$	1921	258,437	91,943	197,628	548,008	26,707,689
	1923	330,179	93,847	278,688	702,714	33,490,504
	1925	604,996	137,346	367,773	1,110,115	34,097,000
	1927	448,884	266,533	593,397	1,308,814	34,421,544
	1928	497,084	110,118	688,983	1,296,185	34,721,520
	1929	560,071	250,917	778,345	1,589,333	36,157,555
	1930	483,884	262,030	619,302	1,365,216	28,512,901
	1931	213,711	125,266	278,817	617,794	16,409,674
	1932	95,821	116,395	360,520	572,736	10,761,090
	1933	129,864	92,129	288,915	510,908	10,040,165
Cost of materials - \$	1921	877,273	139,127	355,780	1,372,180	57,242,686
	1923	1,061,018	159,586	404,308	1,624,912	73,325,718
	1925	1,119,272	195,913	442,213	1,757,398	78,219,728
	1927	858,939	301,404	1,034,193	2,194,536	77,438,700
	1928	911,694	209,513	1,198,074	2,319,281	80,451,801
	1929	848,326	396,001	1,376,324	2,620,651	83,743,952
	1930	960,612	434,162	1,100,975	2,495,749	72,956,762
	1931	275,448	146,150	375,895	797,493	37,379,034
	1932	165,829	116,490	419,909	702,228	23,405,576
	1933	289,994	114,357	285,448	689,799	16,567,347
Gross value of products-\$	1921	1,502,235	307,480	784,990	2,594,705	116,891,191
	1923	2,150,011	305,783	916,740	3,372,534	139,894,677
	1925	2,427,421	371,189	996,593	3,795,203	134,413,845
	1927	2,030,455	664,260	2,172,880	4,867,595	133,620,554
	1928	2,045,146	417,789	2,547,101	5,010,036	139,424,754
	1929	2,095,613	808,488	2,852,440	5,756,541	146,989,564
	1930	1,760,669	1,020,168	2,390,587	5,171,424	121,142,985
	1931	547,587	335,011	821,628	1,704,226	62,769,253
	1932	308,342	261,452	968,704	1,538,498	38,506,647
	1933	470,933	267,557	784,195	1,522,685	39,438,057

Table 4 shows the volume of timber cut and the value of the products of woods operations since 1922. In connection with operations in the woods it should be borne in mind that the forests provide not only the raw material for the sawmills, pulp mills, and other plants, but logs, pulpwood and bolts for export in the unmanufactured state and fuel, poles, railway ties, posts and fence rails, mining timber, piling and other primary products which are finished in the woods ready for use or exportation.

TABLE 4.--Volume of Timber Cut and Value of Products of Woods Operations

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	000 cu.ft.	000 cu.ft.	Quantity 000 cu.ft.	000 cu.ft.	000 cu.ft.
1922	52,097	49,398	54,821	156,316	2,377,845
1923	50,387	77,755	56,411	184,553	2,671,055
1924	57,101	49,896	59,650	166,647	2,808,506
1925	61,985	52,470	61,278	175,733	2,839,138
1926	58,097	53,065	67,800	178,962	2,838,106
1927	98,880	55,516	83,448	237,844	2,865,303
1928	71,992	62,811	90,640	225,443	2,988,038
1929	92,235	102,912	142,474	337,621	3,090,615
1930	94,914	109,262	116,647	320,823	3,056,930
1931	84,936	101,604	102,252	288,792	2,306,144
1932	52,262	71,918	90,221	214,401	1,882,228

TABLE 4.--Volume of Timber Cut and Value of Products of Woods Operations - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	\$	\$	Value '000' omitted	\$	\$
1922	2,596	2,089	2,502	7,187	170,851
1923	2,132	2,754	2,923	7,809	197,459
1924	2,861	2,094	2,758	7,713	213,147
1925	3,107	2,214	2,824	8,145	209,277
1926	2,909	2,236	3,211	8,356	204,436
1927	5,179	2,386	3,961	11,526	204,940
1928	3,900	2,878	4,494	11,272	212,951
1929	4,964	4,879	6,244	16,087	219,570
1930	5,016	5,100	5,897	16,013	206,853
1931	4,170	4,598	4,917	13,685	141,124
1932	1,637	1,814	2,605	6,056	92,106

The general policy of both Dominion and Provincial Governments has been to dispose of the timber by means of licences to cut, the state retaining the ownership of the land and the control of cutting operations.

Revenue is derived in the form of stumpage bonuses, annual ground rent and royalty dues, collected as and when the wood is removed.

Until 1930 the Dominion Government administered the Crown lands, including timber lands in the Prairie Provinces, but the forests as well as other natural resources are now under provincial control.

Upon the transfer of the natural resources in 1930, each province took steps toward the creation of an adequate forest service with a Provincial Forester in charge. In Manitoba the service is under the Department of Mines and Natural Resources and in its forest regulations, framed under the Manitoba Forest Act, the former Dominion Forest Reserves and Crown Timber Regulations are very largely incorporated. In Saskatchewan and Alberta a closely similar policy is being followed. In every case the central object of policy is to safeguard the regeneration of valuable species in the natural forest types. The national forests in these provinces have practically all been retained as provincial forests and some additional reserves have been established, making a total area of 32,458 square miles. Approximately 27,335 square miles of forest lands in the Prairie Provinces are privately owned.

PART 5.--WATER POWERS - CENTRAL POWER STATIONS.

The water power resources of the Prairie Provinces, while much less than those of Ontario and Quebec, are nevertheless of great extent. Table 1 below shows the hydraulic turbine installation as at January 1, 1934, and also the estimated potential power of water falls and sites in each of the Prairie Provinces and in Canada as a whole. These estimates include only rivers where the flows and heads have been measured; they are based on continuous power available twenty-four hours each day at 80 p.c. efficiency, i.e. 80 p.c. of the theoretical power. The two estimates shown are: first, power available throughout the year based on the minimum flow or flow during the dry periods, and second, the maximum available for six months. As power is seldom required continuously 24 hours each day to the full capacity of the generating equipment, water can generally be stored during the hours of light demand and used during the hours of heavy demand. Consequently, whenever feasible, power plants are equipped with generating machinery having a capacity much greater than the theoretical continuous power of the waterfall. Innumerable rapids and falls of greater or lesser capacity scattered on northern rivers and streams are not included in the above estimates. These will become available for tabulation only as more detailed surveys are completed.

TABLE 1.—Potential and Developed Water Power in the Prairie Provinces, January 1, 1934
with Comparative Figures for all Canada.

	Available 24 Hours Power at 80 per cent Efficiency		Turbine Installation 1934
	At Ordinary Minimum Flow	At Ordinary Six Months Flow	
	H.P.	H.P.	
Manitoba	3,309,000	5,344,500	390,925
Saskatchewan	542,000	1,082,000	42,035
Alberta	390,000	1,049,500	71,597
Prairie Provinces	4,241,000	7,476,000	504,557
Canada	20,347,400	33,617,200	7,547,035

Of the three provinces, Manitoba is most favourably situated in respect of both the potential and developed power. There are now five developments on the Winnipeg river, the latest being that at the Seven Sisters site by the Northwest Power Co., and at Slave Falls, 86 miles from Winnipeg.

The first large undertaking in the province of Saskatchewan was placed in operation in June 1930, with an initial installation of 42,000 horse power out of an 84,000 horse power development by the Churchill River Power Co. at Island Falls on the Churchill river. This plant supplies power to the Flin Flon and Sherritt Gordon Mines. Since the war, hydraulic installations in Manitoba have increased 358 p.c., in Alberta 116 p.c., and in Canada 217 p.c.

The actual water wheel installation in each of the Prairie Provinces since 1900 with comparative figures for all Canada is shown in table 2.

TABLE 2.—Hydraulic Installation in the Prairie Provinces and Canada, 1900-34.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	h.p.	h.p.	h.p.	h.p.	h.p.
1900	1,000	-	280	1,280	173,323
1905	1,000	-	355	1,355	454,209
1910	38,800	30	655	39,485	977,171
1915	78,850	30	33,110	111,990	2,105,492
1920	85,325	35	33,122	118,482	2,515,559
1921	99,125	35	33,122	132,282	2,754,157
1922	134,025	35	33,122	167,182	3,008,345
1923	162,025	35	33,122	195,182	3,191,852
1924	162,025	35	34,532	196,592	3,590,596
1925	183,925	35	34,532	218,492	4,338,262
1926	227,925	35	34,532	262,492	4,549,383
1927	255,925	35	34,532	290,492	4,798,917
1928	311,925	35	34,532	346,492	5,349,232
1929	311,925	35	70,532	382,492	5,727,162
1930	311,925	42,035	70,532	424,492	6,125,012
1931	390,925	42,035	70,532	503,492	6,666,337
1932	390,925	42,035	71,597	504,557	7,045,260
1933	390,925	42,035	71,597	504,557	7,332,070
1934	390,925	42,035	71,597	504,557	7,547,035

Of the total installation of water wheels in the three provinces, namely 504,557 horse power, practically the whole is in central electric stations, only 1,312 horse power being developed by other industries for power purposes. The average hydraulic turbine installation per 1,000 population at the beginning of 1934 was 541 in Manitoba, 44 in Saskatchewan and 95 in Alberta as compared with 1,006 in British Columbia, and 714 for Canada as a whole.

The principal statistics of central electric stations during the years 1921-33 are shown in table 3.

TABLE 3.--Principal Statistics of Central Electric Stations, 1921-33.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Number of stations (generating) -	1921	23	88	51	162	510
	1923	26	107	60	193	532
	1925	26	131	66	223	563
	1927	29	158	81	268	629
	1929	30	144	52	226	585
	1931	27	120	56	203	559
	1932	27	122	62	211	572
	1933	26	121	64	211	575
Capital Invested - \$	1921	22,010,612	7,892,735	13,150,843	43,054,190	484,669,451
	1923	24,034,138	8,203,088	14,113,099	46,350,325	581,780,611
	1925	35,610,354	8,761,597	14,946,921	59,318,872	726,721,087
	1927	43,663,433	9,800,550	16,386,917	69,850,900	866,825,285
	1929	49,963,898	13,846,353	24,840,437	88,650,688	1,055,731,532
	1931	59,049,564	32,587,056	27,556,419	119,193,039	1,229,988,951
	1932	71,170,505	32,703,513	27,714,695	131,588,713	1,335,886,987
	1933	71,507,022	31,698,984	27,345,796	130,551,802	1,386,532,055
Net revenue: from sale of power - \$	1921	43,148,012	42,435,037	43,030,117	8,613,166	59,271,622
	1923	3,292,859	2,660,179	2,827,322	8,780,360	67,496,893
	1925	4,245,537	2,849,200	3,202,371	10,297,091	79,341,584
	1927	5,409,242	3,371,814	3,580,203	12,361,259	104,033,297
	1929	6,442,510	4,169,590	4,386,380	14,998,480	122,883,446
	1931	6,464,715	4,768,807	4,674,857	15,908,379	122,310,730
	1932	6,394,409	4,617,842	4,681,024	15,693,275	121,212,679
	1933	6,444,476	4,567,775	4,483,415	15,495,666	117,532,081
Total horse power (including auxiliary) -	1921	97,708	50,918	82,356	230,982	2,111,419
	1923	104,641	49,964	90,803	245,408	2,573,417
	1925	184,794	64,331	95,086	344,211	3,742,697
	1927	290,196	74,022	106,924	471,142	4,318,396
	1929	347,471	77,623	131,280	556,374	5,097,443
	1931	371,375	177,026	150,627	699,028	5,890,800
	1932	431,411	177,454	150,969	759,834	6,528,533
	1933	431,216	177,398	151,139	759,753	6,809,575
Kilowatt hours generated - (000)	1921	271,232	54,295	115,580	441,107	5,614,132
	1923	309,461	60,090	122,113	491,664	8,099,192
	1925	515,915	66,486	129,850	712,251	10,110,459
	1927	875,897	85,603	156,066	1,117,566	14,549,099
	1929	1,108,192	119,455	205,351	1,432,998	17,962,515
	1931	919,233	299,544	205,082	1,423,859	16,330,867
	1932	899,676	323,232	195,467	1,418,375	16,052,057
	1933	881,198	327,176	182,963	1,391,337	17,338,990
Customers - No.	1921	68,721	36,306	52,070	157,097	973,212
	1923	75,751	41,069	54,167	170,987	1,112,547
	1925	102,831	44,394	57,435	204,660	1,279,731
	1927	81,505	47,133	62,787	191,425	1,381,968
	1929	93,173	59,321	73,003	225,497	1,555,883
	1931	92,356	62,429	76,944	231,729	1,632,792
	1932	93,280	62,264	78,138	233,682	1,657,454
	1933	93,273	61,269	77,993	232,535	1,666,882

*One hydraulic station located in Saskatchewan is included with Manitoba data.

TABLE 3.—Principal Statistics of Central Electric Stations, 1921-33 - Cont'd.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Persons employed	-					
	1921	742	422	441	1,605	10,714
	1923	618	434	518	1,570	11,094
	1925	872	444	573	1,889	13,263
	1927	1,064	496	630	2,190	14,708
	1929	1,333	619	742	2,694	16,164
	1931	1,216	753	813	2,782	17,014
	1932	1,127	661	668	2,456	15,395
	1933	992	584	622	2,198	14,717
Salaries and wages	- \$					
	1921	1,181,561	634,490	746,189	2,562,240	15,234,678
	1923	899,175	604,455	765,765	2,269,395	14,784,038
	1925	1,341,313	605,884	857,138	2,804,335	18,755,907
	1927	1,604,613	681,713	858,376	3,144,702	22,946,315
	1929	1,928,708	913,808	1,160,322	4,002,838	24,831,821
	1931	1,942,239	1,064,618	1,083,851	4,090,708	26,306,956
	1932	1,614,435	955,286	935,897	3,505,618	23,261,166
	1933	1,317,984	859,614	866,511	3,044,109	21,431,877

Manitoba and Saskatchewan have followed Ontario's example in public ownership by establishing hydro-electric commissions.

The Manitoba Power Commission was established in 1919. It has built and is now operating an extensive transmission system, supplying electrical power to many thousands of customers throughout Manitoba. This power is purchased under the Seven Sisters power contract from the Northwestern Power Co. and transmitted over high tension steel-tower lines to Portage la Prairie, Brandon and Morden. From this main system power is transmitted to the territory south of the Winnipeg-Brandon main line as far as the International Boundary.

A branch system serving the territory along the western boundary of the province including the towns and villages of Reston, Pipestone, Melita, Napinka, Elkhorn, Miniota, Crandall and Arrow River, has been constructed and is operated by the Commission. The system which, until August 1931, was supplied with power generated by the Commission's plant at Virden, is now tied into the main system and supplied with power generated at Seven Sisters.

The Commission has made purchases of plants at Birtle and Brandon, and entered into contracts for the supply of power by municipally-owned plants e.g. Dauphin, and by the Winnipeg Electric Co., whereby power is supplied to outlying districts. This phase of the Commission's activities has shown steady growth.

The Commission owns and operates the central steam-heating system at Brandon, supplying heat to the business and part of the residential section of the city. The Commission also owns and operates the gas plant supplying gas to commercial and residential customers. It is the intention of the Commission to supply all outlying power areas from the main system just as soon as loads are sufficient to justify the cost of building extensions.

The initial operations of the Saskatchewan Commission were concerned with acquiring by purchase municipally-owned plants which were improved, enlarged or supplemented by installations made by the Commission and were operated as individual systems of supply. Examples of such acquisitions made in 1929 were the Saskatoon, Humboldt, and Rosthern plants, while the plant at Shellbrook, the Wynyard-Elfron-Wadena and the Leader-Prelate-Sceptre systems, served from plants at Wynyard and Leader, were established by the Commission in the same year. In 1930 the municipal plants at North Battleford, Swift Current, Unity, Maple Creek and Lanigan were acquired, and in 1931 the generating plant at Willow Bunch was added. The Watrous-Nokomis system, including ten towns and villages, was also purchased from Canadian Utilities Ltd., and has been connected with the Bulyea system of the Montreal Engineering Co., Ltd.

Transmission lines run from Saskatoon, as the centre of the main system, easterly to Humboldt, northerly to Shellbrook and Duck Lake, westerly to Radisson, and south-westerly to Rosetown. Additional lines link Rosetown with

Moose Jaw and Tisdale, where the Commission has a generating plant, with Nipawin. The systems built in 1929 have been extended. All transmission lines supply towns and villages along their courses. There are now 1,357 miles of transmission lines owned and operated.

The Commission purchases several blocks of power or contracts for the interchange of power from private systems in addition to supplying energy generated at its own plants. The number of consumers served directly in 117 towns and villages is approximately 7,576, and those indirectly served (where the cities operate the distribution systems) number 13,847. The total plant investment as at December 31, 1933, was approximately \$7,477,805.

PART 6.--FISHERIES.

The commercial fisheries of the Prairie Provinces are of minor importance in the industrial life of these provinces, being as yet relatively undeveloped. Their potential value is, however, great. Lakes Winnipeg, Winnipegosis, Manitoba and the smaller lakes to the north and west furnish most of the fish products of Manitoba. Whitefish and pickerel are the chief products, but pike, tullibee, goldeye and many other varieties abound. In Saskatchewan and Alberta commercial fishing is confined to the regions north of the Saskatchewan river where whitefish in large quantities are taken. The problem of transportation is a difficult one; some of the greatest lakes of the continent, Reindeer, Athabaska, Great Slave, Great Bear and hundreds of smaller bodies of water are still beyond reach from a marketing point of view. The lakes of the west, however, repeating the part which the St. Lawrence played in the days of the French Regime and the cod banks in the history of New England, have assisted greatly in the settlement of the country by providing a much needed food supply for the pioneers.

Control of the fisheries of the Prairie Provinces was transferred in 1930, together with the control of the other natural resources, to the Governments of the respective provinces, and matters in connection with the fisheries are now under provincial administration.

The value of fisheries in the Prairie Province since 1906, with comparative figures for all Canada, is shown in table 1, herewith.

TABLE 1.--Value of Fisheries, Prairie Provinces and Canada, 1900-33.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	\$	\$	\$	\$	\$
1900	455,749	262,410 ^{1/}		718,159	21,557,639
1905	1,503,615	199,690	108,265	1,811,570	29,479,562
1910	1,302,779	172,903	82,169	1,557,851	29,965,142
1915	742,925	165,888	94,134	1,002,947	35,860,308
1920	1,249,607	296,472	529,078	2,075,157	49,241,339
1921	1,023,187	243,018	408,868	1,675,073	34,931,935
1922	908,816	245,337	331,239	1,485,392	41,800,210
1923	1,020,595	286,643	438,737	1,745,975	42,565,545
1924	1,232,563	482,492	339,102	2,054,162	44,534,235
1925	1,466,939	494,882	458,504	2,420,325	47,942,131
1926	2,328,803	444,288	749,076	3,522,167	56,360,633
1927	2,039,738	503,609	712,469	3,255,816	49,123,609
1928	2,240,314	563,533	725,050	3,528,897	55,050,973
1929	2,745,205	572,871	732,214	4,050,290	53,518,520
1930	1,811,962	234,501	421,258	2,467,721	47,804,216
1931	1,241,575	317,963	153,897	1,712,435	30,517,306
1932	1,204,892	186,174	153,789	1,544,855	25,957,109
1933	1,076,136	186,417	144,518	1,407,071	27,558,053

^{1/} Alberta and Saskatchewan not shown separately prior to 1905.

PART 7.--FUR PRODUCTION

The northern regions of the Prairie Provinces are still rich in fur-bearing animals, but the increase in trapping and improved methods of capture, together with the advance of lumbering, mining and agricultural settlement tends towards depletion in the numbers of many of the most valuable species. To conserve the fur resources of the country the provinces have found it necessary to enact laws to regulate the capture of fur-bearing animals and to provide for close seasons during certain periods of each year. The raising of fur-bearing animals in captivity is assisting the work of conservation, and the industry of fur farming is playing an increasingly important part in the fur trade of the Prairie Provinces as well as in other parts of the Dominion.

Of the total raw fur production of the Dominion in the season 1932-33, Saskatchewan contributed 11.7 p.c., Alberta, 10.4 p.c., and Manitoba 8.3 p.c. Muskrat is of first importance with regard to total value, and ermine is second.

The number of pelts, comprising those of fur-bearing animals taken by trappers in the Prairie Provinces, and also their values, with comparative figures for Canada, as a whole, are shown in table 1.

TABLE 1.--Raw Fur Production, Prairie Provinces and Canada, 1919-33.

Season	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
<u>Number of Pelts</u>					
1919-20	725,421	622,485	407,946	1,755,852	3,600,004
1920-21	505,177	341,839	539,832	1,386,848	2,936,407
1921-22	643,299	798,066	682,266	2,123,631	4,366,790
1922-23	701,091	1,462,288	873,079	3,036,458	4,963,996
1923-24	711,778	1,161,805	503,070	2,376,653	4,207,593
1924-25	561,888	1,016,527	603,483	2,181,898	3,820,326
1925-26	600,536	650,811	975,855	2,227,202	3,686,148
1926-27	364,713	559,988	1,775,325	2,700,026	4,289,233
1927-28	345,634	686,957	933,150	1,965,741	3,601,153
1928-29	380,151	1,006,432	1,669,551	3,056,134	5,150,328
1929-30	392,483	740,415	770,364	1,903,262	3,798,444
1930-31	407,297	614,238	941,399	1,962,934	4,060,356
1931-32	577,607	593,486	1,121,749	2,292,842	4,449,289
1932-33	555,424	879,552	1,215,052	2,650,028	4,503,558
<u>Value</u>					
	\$	\$	\$	\$	\$
1919-20	3,130,627	2,338,779	1,550,509	7,019,915	21,387,005
1920-21	1,055,865	717,149	1,087,164	2,860,178	10,151,594
1921-22	1,690,278	1,679,812	1,377,139	4,747,229	17,438,867
1922-23	1,673,667	2,242,937	1,822,634	5,739,238	16,761,567
1923-24	1,908,354	1,927,914	1,970,013	5,806,281	15,643,817
1924-25	1,589,078	1,804,052	2,030,974	5,424,104	15,441,564
1925-26	1,869,904	1,370,554	2,122,778	5,363,236	15,072,244
1926-27	1,618,368	1,621,436	2,256,353	5,496,157	18,864,126
1927-28	1,461,116	1,869,551	1,661,692	4,992,359	18,758,177
1928-29	1,292,275	2,208,546	2,473,185	5,974,006	18,745,473
1929-30	809,673	1,328,545	1,174,163	3,312,381	12,158,376
1930-31	698,261	1,132,718	1,121,533	2,952,512	11,803,217
1931-32	689,396	1,043,739	877,343	2,610,478	10,189,481
1932-33	856,289	1,201,038	1,074,917	3,132,244	10,305,154

Fur Farms:- Fur farms in Manitoba increased from 2 in 1920 to 311 in 1931, declined to 270 in 1932 and rose to 280 in 1933. In Saskatchewan they increased from 2 in 1920 to 213 in 1930, declined to 182 in 1932 and rose to 200 in 1933. In Alberta fur farms increased from 15 in 1920 to 448 in 1933, while in Canada, as a whole, fur farms

increased from 587 in 1920 to 6,541 in 1931, declined to 6,296 in 1932 and rose to 6,473 in 1933.

Fox farms are of chief importance numbering in 1933 in Manitoba 194 out of a total of 280; in Saskatchewan 156 out of 200, and in Alberta 360 out of 448. Mink farms numbered 73 in Manitoba, 32 in Saskatchewan and 52 in Alberta.

The principal statistics of fur farms in the Prairie Provinces and Canada for the years 1920-33 are shown in table 2.

TABLE 2.--Principal Statistics of Fur Farms, Prairie Provinces and Canada, 1920-33.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada	
<u>Number of Fur Farms</u>						
1920	2	2	15	19	587	
1921	6	5	14	25	812	
1922	19	9	26	54	1,026	
1923	23	8	47	78	1,227	
1924	34	25	70	129	1,551	
1925	53	42	120	215	2,283	
1926	74	53	146	273	2,709	
1927	105	74	137	316	3,565	
1928	170	112	228	510	4,326	
1929	223	129	251	603	5,513	
1930	308	213	304	825	6,524	
1931	311	204	319	834	6,541	
1932	270	182	352	804	6,296	
1933	280	200	448	928	6,473	
<u>Value of Land and Buildings</u>						
	\$	\$	\$	\$	\$	
1920	53,268	33,000	59,700	145,968	1,202,591	
1921	90,850	37,075	61,875	189,800	1,589,300	
1922	202,685	40,200	62,137	305,022	1,925,951	
1923	239,305	39,231	112,505	391,041	2,072,226	
1924	250,578	80,180	173,130	503,888	2,576,923	
1925	258,605	88,870	249,302	596,777	3,343,226	
1926	271,352	112,726	306,876	690,954	3,897,375	
1927	384,823	214,814	328,999	928,636	5,220,055	
1928	486,505	420,762	463,745	1,371,012	6,574,838	
1929	1,125,935	671,304	618,116	2,415,355	9,052,999	
1930	524,572	738,744	653,712	1,917,028	8,583,346	
1931	508,585	723,311	663,098	1,894,994	7,095,111	
1932	500,333	294,737	769,683	1,564,753	5,969,633	
1933	522,505	659,467	788,309	1,970,281	6,265,201	
<u>Number of Pelts Sold during the Year</u>						
x1920	(	8	)	2	10	2,470
x1921	29	3	53	85	4,997	
x1922	156	16	65	237	6,024	
x1923	162	12	145	319	9,539	
x1924	213	113	313	639	7,339	
x1925	709	69	395	1,173	12,468	
x1926	683	224	1,012	1,919	17,294	
x1927	1,283	623	1,570	3,476	30,262	
1928	2,117	2,065	4,025	8,207	30,836	
1929	2,508	2,049	3,623	8,180	38,311	
1930	5,717	2,506	4,526	12,749	77,657	
1931	9,363	4,946	11,045	25,354	133,248	
1932	8,718	4,900	18,185	31,803	135,718	
1933	10,053	6,521	21,285	37,859	134,381	

*For the years 1920-27 figures for the Prairie Provinces are for fox farms only. These, however, comprise the most important of the fur farms.

TABLE 2.--Principal Statistics of Fur Farms, Prairie Provinces and Canada, 1920-33. - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	\$	\$	Value	\$	\$
x1920	(2,500)		300	2,800	388,335
x1921	4,978	450	6,019	11,397	626,900
x1922	18,025	1,417	5,662	25,104	598,607
x1923	17,247	1,271	5,041	23,559	860,468
x1924	22,235	7,066	24,692	53,993	664,620
x1925	56,339	3,847	19,960	80,146	783,313
x1926	60,029	11,654	77,770	149,453	1,226,052
x1927	144,305	47,874	124,127	316,306	2,163,014
1928	148,836	59,350	169,782	377,968	2,389,026
1929	143,017	71,804	177,779	292,600	2,304,910
1930	177,985	105,222	171,955	455,162	3,096,270
1931	158,998	127,263	251,081	537,342	3,071,460
1932	143,844	111,716	283,459	539,019	3,046,627
1933	248,072	150,376	400,839	799,287	3,712,443
Number of Animals Sold during the Year					
x1920	(87)		42	129	2,347
x1921	134	45	44	223	3,431
x1922	26	12	143	181	4,339
x1923	221	4	220	445	6,106
x1924	369	379	408	1,156	13,041
x1925	995	809	749	2,553	16,415
x1926	258	556	545	1,359	15,015
x1927	737	218	574	1,529	17,378
1928	1,073	752	907	2,732	26,379
1929	3,489	989	1,606	6,084	35,422
1930	1,160	490	1,253	2,903	24,500
1931	795	363	682	1,840	9,623
1932	592	226	444	1,262	7,216
1933	977	477	693	2,147	9,409
	\$	\$	Value	\$	\$
x1920	(76,000)		11,800	87,800	763,221
x1921	75,750	27,000	10,300	113,050	871,205
x1922	17,300	6,000	37,275	60,575	938,918
x1923	69,030	2,000	50,828	121,858	1,314,683
x1924	152,210	7,220	120,255	279,685	2,553,430
x1925	260,820	25,680	212,862	499,362	2,899,294
x1926	55,957	45,469	104,259	205,665	2,298,402
x1927	220,136	37,205	86,862	344,203	2,652,150
1928	186,563	48,099	118,674	353,336	3,837,420
1929	235,383	55,325	162,418	453,126	4,474,953
1930	84,806	46,863	130,727	262,396	1,828,545
1931	35,663	26,661	46,791	109,115	492,000
1932	22,180	9,631	16,688	48,499	243,193
1933	25,406	15,960	21,194	62,560	354,462

* For the years 1920-27 figures for the Prairie Provinces are for fox farms only. These, however, comprise the most important of the fur farms.

TABLE 2.—Principal Statistics of Fur Farms, Prairie Provinces and Canada, 1920-33 - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
<u>Number of Animals on Fur Farms, December 31</u>					
x1920	(318)		1,408	1,726	16,529
x1921	497	126	352	975	23,105
x1922	815	113	420	1,348	30,782
x1923	970	185	914	2,069	40,125
x1924	1,450	545	2,039	4,034	37,102
x1925	1,944	712	3,268	5,924	79,149
x1926	2,392	1,429	3,976	7,797	92,670
x1927	2,979	1,809	4,478	9,266	128,020
1928	14,960	23,388	16,528	54,876	259,682
1929 ¹	134,445	154,290	27,497	316,232	832,059
1930	13,337	147,419	38,054	198,810	568,018
1931	11,005	6,278	49,837	67,120	250,446
1932	8,824	5,124	32,257	46,205	256,205
1933	9,737	7,555	28,466	45,758	199,782
<u>Value</u>					
	\$	\$	\$	\$	\$
x1920	(185,770)		59,670	245,440	4,722,905
x1921	406,525	98,650	72,360	577,535	5,977,545
x1922	451,825	55,000	93,795	600,620	5,864,153
x1923	450,065	88,558	207,600	746,223	6,325,718
x1924	572,356	148,992	492,545	1,213,893	8,389,387
x1925	644,218	171,590	683,288	1,499,096	10,043,194
x1926	656,504	368,645	772,668	1,797,817	11,153,838
x1927	804,597	490,770	842,017	2,137,384	13,618,258
1928	967,550	644,799	1,180,462	2,792,811	16,401,453
1929 ¹	1,913,271	814,412	1,392,448	4,120,131	21,303,035
1930	991,688	1,006,906	1,369,120	3,367,714	16,197,747
1931	625,632	578,207	923,619	2,127,458	8,497,237
1932	508,866	349,728	802,564	1,661,158	6,754,762
1933	649,331	441,896	963,480	2,054,707	7,509,567

*For the years 1920-27 figures for the Prairie Provinces are for fox farms only. These, however, comprise the most important of the fur farms.

¹Due to boom in muskrat farming number of muskrats greatly increased.

PART 8.—MANUFACTURES.

Although greatly overshadowed by agriculture, manufacturing comes second in the net value of production in the Prairie Provinces. It contributed 17.8 p.c. of the net value of production in 1932 as compared with 60.6 p.c. for agriculture. In 1925 the proportions were 9.2 and 80.3 p.c. respectively. According to the Census of Industry conducted by the Dominion Bureau of Statistics, there were in the Prairie Provinces in 1933, 2,866 establishments representing a total capital investment of \$343,015,920, employing 37,307 persons who received as salaries and wages \$37,466,761. The gross value of products was \$182,250,755 and the cost of materials entering into manufactures was \$93,367,340 leaving the net value of manufacturing production in the Prairie Provinces at \$88,883,415.

The growth of manufacturing production in the Prairie Provinces and in Canada, as a whole, since 1900 is shown in table 1. In studying these figures it must be borne in mind that the figures expressed in dollars are affected by changes in the price level which have been especially violent during the past two decades.

During the early part of the period under review the expanding West provided a home market for the growing manufactures of the more industrialized parts of Canada. The War exercised a profound and far reaching influence upon Canadian manufactures and the western provinces, notwithstanding their greater interest in agriculture,

shared in the general stimulation. The inflation of the war and post-war period led to unprecedented figures of values produced.

Expansion was halted by the post-war depression but soon resumed its course, the gross and net values of products reaching a higher point in 1929 than in the post-war boom of 1920 although the prices of manufactured goods had dropped about 41 p.c. in the intervening period. A noteworthy feature of the nineteen twenties was the increasing industrialization of the West, the western provinces experiencing a proportionately greater expansion than the main manufacturing provinces of Ontario and Quebec.

Expansion was again halted by the world wide recession in business that set in towards the end of 1929, although, again, part of the apparent diminution in the volume of manufacturing production was due to declines in the price level of manufactured goods.*

Tables 2, 3 and 4 present statistics of the leading manufacturing industries in each of the Prairie Provinces for the calendar year 1932. The meat packing industry occupied first position in Manitoba and Alberta. Flour milling was first in Saskatchewan, second in Alberta and third in Manitoba. Petroleum products came second in Saskatchewan and third in Alberta. The manufacture of butter and cheese was third in Saskatchewan and fifth in Manitoba and Alberta.

Statistics of the leading industrial cities and towns of the Prairie Provinces are shown in tables 5, 6 and 7.

TABLE 1.--Principal Statistics of Manufactures, Prairie Provinces and Canada, 1900-33.

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada	
Number of establishments -	1900	324	(	105	)	429	14,650
	1905	280		55	97	432	12,547
	1910	439		173	290	902	19,218
	1915	499		238	282	1,019	15,593
	1920	773		639	722	2,134	23,351
	1925	769		650	734	2,153	22,331
	1929	923		761	817	2,501	23,597
	1930	937		750	845	2,532	24,020
	1931	955		768	886	2,609	24,501
	1932	970		774	943	2,687	24,544
1933	1,073		818	975	2,866	25,232	
Capital invested - \$	1900	7,539,691	(	1,689,870	)	9,229,561	446,916,487
	1905	27,070,665		3,820,975	5,400,371	36,292,011	833,916,155
	1910	47,941,540		7,019,951	29,518,346	84,479,837	1,247,583,609
	1915	94,690,750		14,736,860	41,198,897	150,626,507	1,958,705,230
	1920	112,896,616		31,727,162	61,063,132	205,686,910	3,371,940,653
	1925	120,362,238		31,607,896	69,805,848	221,775,982	3,808,309,981
	1929	173,152,948		58,877,124	107,648,028	339,678,100	5,083,014,754
	1930	188,413,164		65,486,140	109,930,271	363,829,575	5,203,316,760
	1931	191,935,311		68,547,866	107,427,603	367,910,780	4,961,312,408
	1932	190,545,652		63,294,823	100,609,788	354,450,263	4,741,255,610
1933	179,720,120		64,950,579	98,345,221	343,015,920	4,689,373,704	
Number of employees -	1900	5,219	(	1,168	)	6,387	339,173
	1905	10,113		1,374	1,983	13,472	383,920
	1910	17,325		3,250	6,980	27,555	515,203
	1915	-		-	-	-	-
	1920	24,481		7,182	11,387	43,050	609,586
	1925	20,023		4,402	9,364	38,789	544,225
	1929	26,318		8,047	13,748	48,113	694,434
	1930	26,488		7,248	14,099	47,835	644,439
	1931	24,193		6,061	11,798	42,052	557,426
	1932	22,255		5,535	11,174	38,964	495,398
1933	20,749		5,614	10,944	37,307	493,903	

*For a more comprehensive treatment of this subject see the Canada Year Book, 1933, pages 400-473, and more especially the section dealing with the measurement of the volume of manufacturing production pages 412-417.

TABLE 1.--Principal Statistics of Manufactures, Prairie Provinces and Canada, 1900-33 - Cont'd.

			Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Salaries and wages	- \$	1900	2,419,549	(465,763)		2,885,312	113,249,350
		1905	5,800,707	681,381	1,129,272	7,611,360	162,155,578
		1910	10,912,866	1,936,284	4,365,661	17,214,811	241,008,416
		1915	13,389,569	2,440,062	4,791,281	20,620,912	283,311,505
		1920	33,357,872	10,249,392	15,903,609	59,510,873	732,120,585
		1925	25,286,173	5,755,629	11,785,604	42,827,406	596,015,171
		1929	34,159,583	10,438,759	16,460,038	61,057,380	813,049,842
		1930	33,941,235	9,229,593	17,092,033	60,262,861	736,092,766
		1931	30,706,209	7,546,703	14,213,753	52,466,665	624,545,561
		1932	24,157,589	6,392,062	11,886,114	42,435,765	505,883,323
		1933	20,699,449	5,871,180	10,896,132	37,466,761	465,562,090
Cost of materials	- \$	1900	7,955,504	(1,121,342)		9,076,846	266,527,858
		1910	30,499,829	2,747,266	9,998,777	43,245,872	601,509,018
		1915	38,529,386	7,417,166	20,669,967	66,616,519	791,943,433
		1920	92,729,271	34,894,105	56,139,646	183,763,022	2,085,271,649
		1925	71,683,113	24,353,581	45,855,910	141,892,604	1,587,665,408
		1929	88,055,264	51,143,205	62,700,608	201,899,077	2,066,636,914
		1930	74,761,265	35,608,157	53,621,884	163,991,306	1,666,983,902
		1931	55,149,392	22,540,618	36,090,169	113,780,179	1,223,880,011
		1932	45,591,099	18,214,555	28,442,192	92,247,846	955,968,683
		1933	44,697,266	19,164,919	29,505,155	93,367,340	969,188,574
Gross value of products	- \$	1900	12,927,439	(1,964,987)		14,892,426	481,053,375
		1905	27,857,396	2,443,801	4,979,932	35,281,129	706,446,578
		1910	53,673,609	6,332,132	18,788,825	78,794,566	1,165,975,639
		1915	60,481,446	13,355,206	29,416,221	103,252,873	1,381,547,225
		1920	158,221,908	59,549,634	88,606,074	306,377,616	3,772,250,057
		1925	124,145,763	40,093,273	75,113,517	239,352,553	2,948,545,315
		1929	164,909,127	80,435,537	106,824,476	352,967,078	4,029,371,340
		1930	142,424,990	62,276,766	94,314,782	299,016,538	3,428,970,628
		1931	118,540,865	44,265,151	68,367,411	231,173,427	2,698,461,862
		1932	96,056,029	36,101,516	55,293,832	187,451,377	2,126,194,555
		1933	91,408,441	36,199,608	54,642,706	182,250,755	2,086,847,847

NOTE: Prior to 1915 establishments with five hands and over are included; thereafter all establishments. Statistics of the non-ferrous metal smelting industry included in 1925 and later years. Statistics of "Construction, hand trades and repairs" were not collected after 1921.

TABLE 2.--Principal Statistics of the Leading Manufacturing Industries of Manitoba, 1932.

Industries	Establishments	Capital Invested	Employees	Salaries and Wages	Cost of Materials	Gross Value of Products
	No.	\$	No.	\$	\$	\$
1. Slaughtering and meat packing	7	5,458,152	1,214	1,349,910	9,329,829	13,011,468
2. Railway rolling stock	4	13,907,199	4,700	4,603,554	3,807,520	8,936,011
3. Central electric stations	39	78,330,880	1,161	1,667,848	-	6,534,141
4. Flour and feed mills	39	4,019,843	479	487,780	5,261,727	6,443,072
5. Butter and cheese	69	4,687,078	993	1,245,321	3,559,440	6,239,213
6. Printing and publishing	74	4,210,249	1,112	1,775,159	632,650	3,943,006
7. Printing and bookbinding	80	4,104,578	1,180	1,496,292	1,084,352	3,163,893
8. Bread and other bakery products	136	3,002,755	922	888,403	1,274,557	2,920,983
9. Bags, cotton and jute	5	1,563,351	227	256,665	1,879,421	2,478,855
10. Breweries	6	4,384,471	422	642,093	566,795	2,461,551
11. Furnishing goods, men's	17	982,656	768	553,435	1,259,095	2,050,153
12. Coffee, tea and spices	8	1,439,858	161	178,436	1,471,054	1,986,718
13. Malt and malt products	3	3,645,754	91	172,413	1,034,507	1,826,681
14. Clothing, factory, women's	24	612,840	862	488,453	843,725	1,544,199
15. Biscuits, confectionery, cocoa and chocolate	21	2,322,064	484	373,570	768,288	1,523,745
16. Dyeing, cleaning and laundry work	20	1,813,686	871	758,087	138,663	1,430,866
17. Coke and gas products	4	5,550,457	195	209,776	509,984	1,181,437
18. Medicinal and pharmaceutical preparations	7	1,396,029	131	169,249	465,546	1,127,590
19. Fur goods	20	685,909	270	257,953	655,491	1,078,668
Total, Leading Industries	583	42,127,809	16,243	17,574,397	34,542,644	69,882,250
Total, All Industries	970	190,545,652	22,255	24,157,589	45,591,099	96,056,029

NOTE: Statistics for Non-ferrous metal smelting which is also one of the leading industries of this province, cannot be published because there are fewer than three establishments reporting.

TABLE 3.--Principal Statistics of the Leading Manufacturing Industries of Saskatchewan, 1932.

Industries	Establish- ments No.	Capital Invested \$	Employ- ees No.	Salaries and Wages \$	Cost of Materials \$	Gross Value of Products \$
Flour and feed mills	69	11,114,615	511	614,671	5,983,177	9,468,912
Petroleum products	3	4,920,853	251	364,798	4,685,874	5,694,731
Butter and cheese	67	3,809,931	647	770,618	3,059,359	5,000,690
Central electric stations	130	25,543,138	627	901,873	-	4,478,110
Slaughtering and meat packing	6	1,739,018	421	464,191	1,531,231	2,256,091
Printing and publishing	126	2,595,101	773	1,124,204	391,635	2,249,987
Breweries	10	3,742,849	219	279,651	667,356	1,969,771
Bread and other bakery products	158	2,857,535	630	558,665	801,631	1,803,512
Dyeing, cleaning and laundry work	17	968,804	298	251,423	57,269	484,142
Planing mills, sash and door factories ..	17	1,392,178	188	163,033	242,831	417,512
Total, Leading Industries	603	58,684,022	4,565	5,493,127	17,420,363	33,823,458
Total, All Industries	774	63,294,823	5,535	6,392,062	18,214,555	36,101,516

TABLE 4.--Principal Statistics of the Leading Manufacturing Industries of Alberta, 1932.

Industries	Establish- ments No.	Capital Invested \$	Employ- ees No.	Salaries and Wages \$	Cost of Materials \$	Gross Value of Products \$
Slaughtering and meat packing	7	7,148,799	1,228	1,240,829	5,894,602	8,437,040
Flour and feed mills	79	8,625,602	714	798,714	6,131,369	8,334,777
Petroleum products	6	7,224,511	292	440,853	4,111,166	5,363,289
Central electric stations	77	27,714,695	668	935,897	-	4,681,024
Butter and cheese	103	3,496,170	564	636,564	2,981,501	4,515,025
Railway rolling stock	3	6,779,834	1,605	1,658,267	1,319,253	3,078,622
Printing and publishing	84	3,341,528	793	1,178,016	438,888	2,594,451
Bread and other bakery products	162	2,420,848	696	646,668	1,046,319	2,316,262
Breweries	5	5,503,180	221	342,123	617,375	1,927,937
Sawmills	154	1,846,363	724	360,520	419,909	968,704
All other leading industries 1/	3	4,486,104	341	335,573	2,015,793	3,394,479
Total, Leading Industries	683	78,587,634	7,846	8,574,024	24,976,175	45,611,610
Total, All Industries	943	100,609,788	11,174	11,886,114	28,442,192	55,293,832

1/ Includes sugar refining and wood preservation.

TABLE 5.--Manufacturing Statistics of Leading Cities, Towns and Villages in the Province of Manitoba, 1932.[†]

Cities, Towns and Villages	Establish- ments No.	Capital Invested \$	Employ- ees No.	Salaries and Wages \$	Cost of Materials \$	Gross Value of Products \$
Winnipeg	559	70,201,107	16,119	17,426,358	26,989,727	56,415,286
St. Boniface	39	9,513,146	1,413	1,475,986	9,914,712	14,933,971
Transcona	4	6,287,763	1,606	1,700,538	2,194,965	4,225,732
Portage La Prairie	10	787,879	117	117,330	870,576	1,111,034
Brandon	33	1,332,254	273	298,588	477,729	988,853
Selkirk	6	1,724,294	223	273,064	167,724	621,902
Dauphin	11	235,394	65	60,255	154,829	295,000
The Pas	5	588,297	73	71,344	199,170	222,752
Neepawa	6	204,881	29	30,352	146,629	207,156
Shoal Lake	3	65,163	19	15,807	114,772	156,821
Virden	4	42,207	14	12,583	77,016	110,175
Russell	3	52,280	8	7,525	81,329	106,222
Wawanesa	4	74,309	14	10,104	44,224	100,438
Morden	5	51,880	13	9,905	63,092	92,625
Souris	5	77,183	14	11,893	63,985	84,380
Melita	3	16,663	7	6,857	55,369	83,081
Teulon	3	17,562	7	7,180	48,636	69,787
Winkler	3	39,945	8	7,510	51,038	69,406
Stonewall	4	314,556	32	28,229	9,306	57,714
Manitou	3	26,172	8	8,062	29,819	50,046
Total, Leading Cities, Towns and Villages	713	91,652,935	20,062	21,579,470	41,754,647	80,002,381
Total, Province of Manitoba	970	190,545,652	22,255	24,157,589	45,591,099	96,056,029

[†] The above figures for cities, towns and villages do not include statistics of Central electric stations.

TABLE 6.—Manufacturing Statistics of Leading Cities, Towns and Villages in the Province of Saskatchewan, 1932. 1/

Cities, Towns and Villages	Establish- ments No.	Capital Invested \$	Employ- ees No.	Salaries and Wages \$	Cost of Materials \$	Gross Value of Products \$
Regina	92	12,196,826	1,479	1,899,050	6,461,020	10,368,797
Saskatoon	71	7,877,570	1,146	1,397,450	3,952,118	7,711,455
Moose Jaw	34	10,388,082	690	823,738	4,113,066	6,572,467
Prince Albert	22	1,576,608	333	373,445	829,633	1,907,291
Yorkton	12	408,665	55	61,125	210,895	391,425
North Battleford	12	440,043	93	93,404	163,866	365,785
Melville	6	131,668	30	23,697	230,647	300,694
Swift Current	14	491,986	75	76,816	120,371	253,038
Weyburn	10	463,466	42	49,245	115,494	240,726
Humboldt	4	99,463	17	20,718	110,126	168,041
Estevan	9	165,343	31	31,420	53,318	123,631
Biggar	7	73,700	21	21,308	68,252	118,513
Melfort	5	111,672	16	16,185	55,032	101,149
Foam Lake	4	63,602	12	10,304	63,213	95,604
Tisdale	5	86,390	18	13,151	54,277	93,705
Lloydminster	6	77,150	14	13,921	56,319	91,004
Moosomin	4	47,028	14	9,054	63,233	89,263
Canora	3	55,932	11	8,917	44,189	80,943
Unity	5	52,786	15	16,446	45,412	78,422
Outlook	3	98,012	10	13,515	53,029	77,585
Kamsack	3	32,525	10	8,296	51,199	73,762
Rosthern	4	71,776	15	11,406	43,216	68,270
Battleford	4	66,764	10	8,355	44,748	67,574
Carlyle	3	30,105	5	5,600	44,523	65,035
Total Leading Cities, Towns and Villages	342	35,107,162	4,162	5,006,566	17,047,196	29,497,159
Total for the Province	774	63,294,823	5,535	6,392,062	18,214,555	36,101,516

1/ The above figures for cities, towns and villages do not include statistics of Central electric stations.

TABLE 7.—Manufacturing Statistics of Leading Cities, Towns and Villages in the Province of Alberta, 1932. 1/

Cities, Towns and Villages	Establish- ments No.	Capital Invested \$	Employ- ees No.	Salaries and Wages \$	Cost of Materials \$	Gross Value of Products \$
Calgary	157	33,361,700	4,090	4,527,506	11,923,221	20,974,281
Edmonton	147	17,209,712	3,617	3,882,921	7,894,070	14,806,333
Medicine Hat	21	5,304,636	473	527,415	2,582,102	3,640,556
Raymond	4	3,039,513	231	233,250	1,048,107	2,371,954
Lethbridge	24	2,524,839	294	367,610	643,197	1,410,993
Redcliffe	6	1,567,885	195	197,793	281,215	612,654
Wetaskiwin	9	192,161	33	31,987	178,894	264,560
Camrose	8	164,420	29	33,580	100,198	195,894
Red Deer	10	127,387	36	42,471	91,620	161,141
Ponoka	7	63,111	15	14,325	90,257	141,188
Viking	3	45,944	10	15,729	77,643	109,627
Vegreville	6	70,897	14	13,769	63,007	107,252
Stettler	4	87,440	14	14,368	62,854	104,557
Vermilion	5	120,893	16	17,102	52,660	103,851
Coronation	5	35,329	18	11,173	75,970	102,929
Lacombe	5	48,915	19	12,276	56,727	92,044
Drumheller	7	129,974	28	29,553	35,949	83,115
Innisfail	4	37,586	10	9,958	52,274	81,206
Olds	5	48,074	12	11,423	47,677	78,852
Didsbury	5	41,892	10	9,979	57,737	75,731
Tofield	5	33,188	8	6,000	48,975	68,413
St. Paul de Metis	6	52,691	14	11,820	37,526	63,714
Leduc	5	49,055	11	8,223	40,941	62,653
High River	6	71,158	15	10,919	23,730	61,341
Hanna	3	23,008	9	7,090	50,482	60,479
Claresholm	6	46,826	9	5,795	37,226	58,844
Wainwright	3	61,747	11	12,007	12,136	54,968
Castor	4	23,752	8	6,546	37,957	54,716
Total, Leading Cities, Towns and Villages	380	64,583,733	9,249	10,072,588	25,704,352	46,003,911
Total for the Province	943	100,609,788	11,174	11,886,114	28,442,192	55,293,832

1/ The above figures for cities, towns and villages do not include statistics of Central electric stations.

APPENDIX TO CHAPTER III.

ASSISTANCE PROVIDED BY GOVERNMENT TO WESTERN CANADIAN COALS.^x

1. Apart from tariffs, Government assistance to the western coal mining industry has been designed chiefly to facilitate the transportation of Western Canadian coal to the consuming centres in Manitoba and Ontario, with the aim of enabling Canada, so far as is economically possible, to be independent of foreign fuel supplies. With two exceptions (which will be noted later) the assistance provided has been in the form of a reduction in the freight rate on the Canadian coal transported.
2. Between 1923 and 1928 several plans were worked out between the Canadian National Railway and the Provincial or Federal Governments with the object of facilitating movements of Alberta coal to Ontario through reduced freight rates but the tonnage actually moved under these arrangements was limited. In 1928 the Federal Government arranged for a test movement of Alberta coal to Ontario under a flat freight rate of \$6.75 per ton, the object of this arrangement was to enable Alberta domestic coals to compete with imported anthracite in the Eastern Ontario market. Two years later assistance was extended to coals from Alberta and the Crows Nest Pass district of British Columbia when transported to points in Manitoba where foreign coals had the advantage. This assistance was confined to coals for industrial use, the domestic market in Manitoba being dominated by western domestic coals without the necessity for assistance. At this time assistance was also provided for coal used in the manufacture of briquettes and transported to Manitoba. This assistance expired in the spring of 1931. In 1930 assistance was first provided for Saskatchewan lignite and briquettes moved to Manitoba.

In 1931 the rate of assistance to Alberta and Crows Nest B.C. coals was increased and the territory for which the assistance would apply was extended to cover points in Western Ontario as far east as Fort Frances and Sioux Lookout. Saskatchewan also shared in this increase in territory.

In 1933 and 1934 further changes were made, the most important being the application of assistance to railway coal in 1933, the reduction in limits and rates in 1934, and the establishment of an effective rate of \$5.50 per ton on Alberta coal shipped to points in Ontario where the normal freight rate was \$8.00 per ton or over.

3. The exceptions to the principle of assistance through reductions in freight rates, as noted in the first paragraph, cover the application of the Domestic Fuel Act, 1927 to British Columbia, and the provision made in 1931 of a bonus to stimulate the export of British Columbia coals and the sale of such coals for ships' stores. The bonus, originally 25 cents per net ton, was increased in the same year to 50 cents per gross ton for bunker coal and \$1.00 per gross ton for export coal. In 1934 this rate was placed upon a net ton basis with provision for the \$1.00 rate to apply on bunker coal over 60,000 tons in any year.

A by-product coking plant in Vancouver is now in operation under the Domestic Fuel Act, 1927 and will use a substantial tonnage of Canadian coal yearly.

4. The tonnages affected by the various forms of assistance are given in the following table:-

Calendar Years	Alberta Coal to Ontario under Flat Rates	Alberta & Crows Nest B.C. Coal to Manitoba & Ontario	Saskatchewan Coal to Manitoba & Ontario	B.C. Coal for Export & Bunker	Total
	(Net Tons)	(Net Tons)	(Net Tons)	(Net Tons)	(Net Tons)
1928	32,101	-	-	-	32,101
1929	37,115	-	-	-	37,115
1930	33,049	55,474 ^f	19,604	-	108,127
1931	23,483	180,990 ^f	60,477 ^f	55,678	320,628
1932	19,116	218,668	100,479	81,639	419,902
1933	30,531	229,204	130,966	60,372	451,073
1934 (11 months)	44,474	244,554	127,157	71,246	487,431
T O T A L	219,869	928,890	438,683	268,935	1,856,377

^xPrepared by the Dominion Fuel Board.
^fIncludes movements of briquettes.

CHAPTER IV.—TRADE

Canada is one of the largest countries in the world, comprising areas of the most varied resources. It may be divided into five economic areas each as large as great nations in other parts of the world. The Maritime Provinces, for instance, are as large as England; Quebec is as large as Germany, France and Spain together; Ontario is much larger than Sweden, Norway and Denmark; the Prairie Provinces are together larger than France, Spain, Germany and Italy; British Columbia is almost three times as large as the British Isles.

Trade between such great areas as the above and over such long distances would, in most parts of the world, constitute international trade and would, therefore, be carefully recorded as to quantities and values. Indeed, prior to Confederation there were statistics of trade between the then existing British North American provinces but after Confederation these ceased to be recorded. At present, there are no comprehensive statistics of interprovincial trade. There is no adequate record of the goods transported by water but there is a fairly complete record of the quantities of goods entering into the trade of the provinces by land over our railways.

The Prairie Provinces comprise the only one of Canada's economic areas for which rail transportation figures show practically the whole of the trade movement.^x By using these as a basis and approximating as closely as possible to average values, it is possible to obtain some idea as to the value of the commodities which these provinces ship south, east and west, and of the commodities which they import in return. In other words it is possible to arrive at some rather tentative conclusions as to the trade of the Prairie Provinces, considered as a unit, with the rest of the world.

TRADE THROUGH CUSTOMS PORTS IN THE PRAIRIE PROVINCES.

The trade through customs ports in the Prairie Provinces from 1900 to the present time is shown in table 1. The significance of this table, however, pertains more to transportation and the volume of port business than to provincial trade, as the statistics include, in the case of exports, certain goods originating in Canada outside the Prairie Provinces and, in the case of imports, certain goods not destined for consumption within the Prairie Provinces. On the other hand, a much larger quantity of goods destined to be consumed in the Prairie Provinces are imported through ports in other provinces, while the products of the Prairie Provinces consigned for export from the Dominion are very largely exported from Montreal, Port Arthur or Vancouver, and are thus accredited to Quebec, Ontario or British Columbia respectively.

^xExports of grain via Churchill, Manitoba's new seaport are increasing. Wheat exports since the completion of the port have been as follows:

	Bushels	\$
Fiscal year 1931-32	544,770	272,385
" " 1932-33	2,735,939	1,603,743
" " 1933-34	2,707,879	2,437,170
April - October 1934	4,049,871	3,846,641

TABLE 1.—Trade Through Customs Ports in the Prairie Provinces and Canada, Fiscal Years, 1900-34.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Imports	\$	\$	\$	\$	\$
1900	6,699,144	(1,108,281)		7,807,425	180,804,316
1911	34,625,450	10,908,551	9,135,678	54,669,679	461,951,318
1916	26,637,882	6,337,007	6,489,378	39,464,267	542,077,361
1917	40,539,922	12,530,874	9,986,161	63,056,957	873,437,426
1918	46,743,791	16,752,631	16,097,622	79,594,044	963,532,578
1919	48,778,054	17,388,052	15,925,409	82,091,515	919,711,705
1920	55,289,988	16,618,407	18,883,725	90,792,120	1,064,528,123
1921	64,823,482	21,716,892	24,227,312	110,767,686	1,240,158,882
1922	36,598,830	10,197,155	11,924,175	58,720,160	747,804,332
1923	38,878,342	10,715,736	10,395,686	59,989,764	802,579,244
1924	39,671,333	12,933,047	12,550,669	65,155,049	893,366,867
1925	37,176,705	9,866,108	13,497,902	60,540,715	796,932,537
1926	42,877,647	14,896,870	17,214,760	74,989,277	927,328,732

TABLE 1.--Trade Through Customs Ports in the Prairie Provinces and Canada, Fiscal Years, 1900-34 - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Imports - Cont'd.	\$	\$	\$	\$	\$
1927	49,332,083	20,700,339	21,593,904	91,626,326	1,020,892,505
1928	52,820,449	26,645,363	25,900,148	105,365,960	1,108,956,466
1929	59,688,197	37,852,714	36,348,227	133,889,138	1,265,679,091
1930	54,796,610	31,390,356	38,921,146	125,108,112	1,248,273,582
1931	35,971,119	18,766,485	21,049,995	75,787,599	906,612,681
1932	19,897,480	6,028,614	9,741,112	35,667,206	578,503,904
1933	13,949,286	4,891,540	6,420,955	25,261,781	406,383,744
1934	14,322,385	4,462,697	6,471,251	25,256,333	433,798,625
(1934 calendar year)	15,582,205	5,337,476	8,555,196	29,474,877	513,447,161

NOTE: (1) The above table indicates that merchandise of the values stated was entered inward at customs ports located in the several provinces, but does not imply that the imports were all for consumption in the provinces in which entry was made.

(2) 1900-17 includes coin and bullion, thereafter merchandise only.

Exports					
1900	3,568,675	(345,850)		3,914,525	191,894,723
1911	3,134,564	4,056,582	365,265	7,496,411	297,196,365
1916	13,452,106	8,986,038	344,491	22,782,635	882,872,502
1917	17,686,121	14,803,323	288,392	32,777,836	1,375,758,148
1918	22,915,538	17,924,463	631,231	41,471,232	1,586,169,792
1919	22,906,768	20,707,513	2,256,186	45,870,467	1,268,765,285
1920	34,572,629	30,852,848	2,209,910	67,635,387	1,286,658,709
1921	25,422,155	22,453,551	1,265,682	49,141,388	1,210,428,119
1922	8,399,369	7,756,635	601,915	16,757,919	753,927,009
1923	12,922,397	12,937,167	637,097	26,496,661	945,295,837
1924	11,062,364	11,095,651	433,850	22,591,865	1,058,763,297
1925	10,995,015	10,099,380	2,230,562	23,324,957	1,081,361,643
1926	12,414,741	10,241,997	669,954	23,326,692	1,328,700,137
1927	15,496,501	9,849,274	1,153,353	26,499,128	1,267,573,142
1928	18,399,513	10,572,347	948,037	29,918,897	1,250,598,034
1929	17,084,508	11,051,625	1,211,160	29,347,293	1,388,896,075
1930	15,918,097	10,727,940	1,141,670	27,787,687	1,144,938,070
1931	8,289,406	5,729,062	847,591	14,866,059	817,028,048
1932	4,574,126	3,242,573	502,340	8,319,039	587,565,517
1933	4,876,761	1,446,616	442,157	6,765,534	480,713,797
1934	7,975,649	2,396,430	553,497	10,925,576	585,654,469
(1934 calendar year)	10,159,944	2,061,325	429,437	12,650,706	652,887,228

NOTE: (1) The above table indicates that merchandise of the values stated passed outward from Canada through ports located in the several provinces but does not imply that the exports originated in the province whence the goods were exported.

(2) 1900-17 includes coin and bullion, thereafter merchandise only.

RAILWAY TRAFFIC IN THE PRAIRIE PROVINCES AS AN INDEX OF EXTERNAL TRADE

During the year 1933 the gross volume of all traffic loaded by railways in the Prairie Provinces amounted to 15,854,825 tons, made up of 10,376,013 tons of agricultural products; 522,219 tons of animal products; 2,894,345 tons of mine products; 863,011 tons of forest products and 1,199,237 tons of manufactured and miscellaneous products. Freight unloaded by railways at stations within the Prairie Provinces amounted to 8,091,975 tons grouped as follows: agricultural products, 1,944,625 tons; animal products, 269,731 tons; mine products, 3,287,832 tons; forest products, 914,311 tons and manufactured and miscellaneous products, 1,675,476 tons. The excess of freight loaded over freight unloaded in the Prairie Provinces, therefore, amounted to 7,762,850 tons..

Since 1933 was a year when trade was severely depressed, we may examine for a moment corresponding figures for one of the boom years of the present cycle. In 1928 the gross volume of all traffic loaded by railways in the Prairie Provinces amounted to 30,204,146 tons, made up of:- agricultural products, 20,079,971 tons; animal products, 687,841 tons; mine products, 5,111,920 tons; forest products, 1,427,570 tons and manufactured and miscellaneous 2,896,844 tons. Freight unloaded at stations within the Prairie Provinces amounted to 16,150,175 tons made up of:- agricultural products, 3,481,527 tons; animal products, 482,472 tons; mine products, 5,960,434 tons; forest products, 1,934,640 tons and manufactured and miscellaneous goods 4,291,102 tons. The excess of freight loaded over freight unloaded in 1928, therefore, amounted to 14,053,971 tons. Comparative figures for the years 1921-33 are shown in table 2.

Returns from the railway companies show that total net shipments of wheat from the Prairie Provinces during the calendar year 1933 amounted to 7,332,020 tons or nearly 244,401,000 bushels. This compares with a shipment of 468,214,333 bushels in 1928. Shipments of coarse grain from these provinces in 1933 amounted to 18,441,471 bushels of oats; 8,660,000 bushels of barley; 2,262,250 bushels of rye; 1,015,214 bushels of flaxseed and 27,786 bushels of corn. Corresponding shipments in 1928 were:- oats, 36,454,824 bushels; barley, 41,921,166 bushels; rye, 9,137,715 bushels; flaxseed, 3,071,000 bushels and corn 365,893 bushels.

Naturally, in a large grain-producing district, flour and grist milling is an important industry. The mills of the Prairie Provinces grind not only for consumption within these provinces but also for shipment outside. Flour ground in the West and later shipped mainly to eastern Canada and British Columbia amounted to 3,347,989 barrels in 1933 as compared with 4,087,184 barrels in 1928. Other mill products manufactured and shipped out amounted to 241,789 tons in 1933 and to 325,981 tons in 1928.

The Prairie Provinces have, generally speaking, no surplus of fruits and vegetables. Over 540,000 barrels of apples were imported into these provinces during 1933 for consumption therein. Other fresh fruit brought in amounted to 53,652 tons and fresh vegetables other than potatoes to 21,804 tons. Importations of potatoes amounted to 22,033 bushels.

Animal husbandry is the second most important branch of agriculture in western Canada. Although greatly overshadowed by grain products, animals and animal products are shipped out in considerable quantities. The total net shipment of animals and animal products out of the Prairie Provinces in 1933 amounted to 252,488 tons. Net shipments of cattle and calves amounted to 61,424 tons; hogs to 36,828 tons; horses to 9,106 tons; dressed meats, fresh, to 40,026 tons and dressed meats, cured or salted to 27,231 tons. For further details see table 3.

As Alberta is a large producer of coal, much of the coal required for consumption in the Prairie Provinces is naturally drawn from this source. Alberta exported 1,224,632 tons of lignite in 1933, while Manitoba imported 378,626 tons and Saskatchewan 620,749 tons. The net shipment out of the Prairie Provinces in 1933 was 225,257 tons. The movement of Alberta coal to central Canada to replace some of that imported from the United States is being fostered,* (shipments which in 1923 amounted to 79,384 tons increased to 854,429 by 1928, but declined to 225,257 tons in 1933). Some United States anthracite and bituminous coal is brought into the West for consumption in Eastern Manitoba and Saskatchewan, 10,658 tons of anthracite and 322,140 tons of bituminous coal being imported into Manitoba in 1933, while 977 tons of anthracite and 143,205 tons of bituminous coal were imported into Saskatchewan. Coke amounting to 17,354 tons was also shipped into the Prairie Provinces in 1933. Shipments of crude petroleum from the United States to refineries located in the Prairie Provinces are also of considerable volume. In 1933 these shipments amounted to 364,451 tons. Shipments of salt were also large, amounting to 51,083 tons. The aggregate net shipment of mine products into the Prairie Provinces in 1933 was 393,487 tons and in 1929, 947,450 tons.

The balance of trade in forest products is against the Prairie Provinces. While 46,613 tons of pulp-wood and 26,185 tons of cordwood were shipped out of the Prairie Provinces in 1933, net shipments into this area were as follows: railway ties, 1,808 tons; lumber, timber, boxshooks, staves and heading, 97,088 tons; logs, posts and poles 23,015 tons; other forest products 2,187 tons. The net import of forest products into the Prairie Provinces in 1933 amounted to 51,300 tons.

The industrial section of Canada is located mainly in the central provinces. While manufacturing occupies an increasingly important place in Western Canada, large quantities of manufactured goods are also imported. In addition to the crude petroleum shipped in for refining purposes, 163,257 tons of refined petroleum and its products

*See Chapter III, Appendix 1.

were imported into the Prairie Provinces in 1933. Imports of sugar amounted to 65,773 tons. Sugar beet cultivation is carried on in Southern Alberta and southern Manitoba, the largest beet sugar refining plant in Canada being located at Raymond, Alberta. This is a comparatively new industry and the sugar produced will probably fall short of meeting the requirements of the people of the Prairie Provinces for a considerable time. Considerable quantities of iron and steel products are imported into the prairie region. Net imports of bar and sheet iron, structural iron and iron pipe amounted to 10,988 tons; of castings, machinery and boilers to 2,456 tons; of rails and fastenings to 835 tons and of pig and bloom iron to 599 tons. Agricultural implements and vehicles other than automobiles amounted to 15,083 tons, while automobiles and trucks were shipped in to the net amount of 11,758 tons. Canned goods shipments amounted to 50,437 tons. For comparative figures for earlier years see table 3.

Among the shipments of manufactured and miscellaneous goods from the Prairie Provinces to other parts of Canada in 1933, lime and plaster amounted to 7,918 tons and cement to 7,540 tons. Other shipments of manufactured and miscellaneous commodities in 1933 included 3,281 tons of wood pulp and 5,451 tons of fish. The net shipments of manufactured and miscellaneous goods into the Prairie Provinces in 1933, as shown by railway returns, amounted to 476,239 tons as compared with 1,428,518 tons in 1929.

From the statement of revenue freight carried by Canadian railways it would therefore appear that, while the prairie region is a considerable exporter of grain and also of live animals and animal products, it is, on balance, an importer of products of the forest and mine and of manufactured and miscellaneous goods. The net shipments in tons under these headings in 1933 were as follows:-

	<u>Shipped Out</u> tons	<u>Shipped In</u> tons
Agricultural products (vegetable)	8,431,388	
Animal products	252,488	
Mine products		393,487
Forest products		51,300
Manufactured and miscellaneous		476,239
	<u>8,683,876</u>	<u>921,026</u>

Thus the total net export of all commodities from the prairie region in 1933 amounted to 7,762,850 tons.

It must be remembered that 1933 was a year of extreme depression and that, to get a correct idea of the normal trade relations of the Prairie Provinces it is necessary to study the record over a period of years. This is set out in detail in tables 2 and 3.

TABLE 2.--Railway Revenue Freight Tonnages, Prairie Provinces, 1921-33.

	Year	Manitoba	Saskatchewan	Alberta	Prairie Provinces
		<u>Freight Loaded on Cars</u>			
Agricultural Products	1921	2,282,297	5,327,029	2,676,171	10,285,497
	1922	3,165,231	6,781,157	2,918,781	12,865,169
	1923	2,570,202	7,051,947	4,059,408	13,681,557
	1924	2,730,302	5,569,524	4,324,073	12,623,899
	1925	3,106,068	6,874,878	3,837,932	13,818,878
	1926	3,249,161	6,602,567	4,103,474	13,955,202
	1927	2,711,267	6,539,795	4,711,957	13,963,019
	1928	3,417,095	9,396,763	7,266,113	20,079,971
	1929	2,067,383	4,897,635	4,555,983	11,521,001
	1930	2,194,311	5,038,931	3,931,880	11,165,122
	1931	1,555,998	4,885,226	4,397,363	10,838,587
	1932	1,696,542	4,959,394	5,617,340	12,273,276
	1933	1,667,331	4,398,063	4,310,619	10,376,013

TABLE 2.--Railway Revenue Freight Tonnages, Prairie Provinces, 1921-33 - Cont'd.

	Year	Manitoba	Saskatchewan	Alberta	Prairie Provinces
			Freight Loaded on Cars		
Animal Products -	1921	182,363	81,553	231,985	495,901
	1922	238,944	126,208	331,953	697,105
	1923	260,519	135,970	272,127	668,616
	1924	296,533	159,079	349,249	804,861
	1925	327,875	154,773	382,179	864,827
	1926	290,270	158,381	363,289	811,940
	1927	302,426	156,289	299,907	758,622
	1928	258,315	150,977	278,549	687,841
	1929	248,153	157,881	283,136	689,170
	1930	152,765	115,242	212,543	480,550
	1931	190,776	128,820	209,750	529,346
	1932	150,090	113,879	214,622	478,591
	1933	160,123	128,433	233,663	522,219
Mine Products -	1921	557,536	185,565	2,983,017	3,726,118
	1922	628,894	196,479	2,962,881	3,788,254
	1923	601,342	167,208	2,873,233	3,641,783
	1924	526,477	209,705	2,754,089	3,490,271
	1925	800,852	244,401	2,988,263	4,033,516
	1926	838,155	311,608	3,205,545	4,355,308
	1927	1,111,169	352,570	3,320,134	4,783,873
	1928	1,068,672	425,594	3,617,654	5,111,920
	1929	1,197,666	429,856	3,663,346	5,290,868
	1930	1,005,582	590,234	3,322,945	4,918,761
	1931	950,791	442,267	2,638,199	4,031,257
	1932	615,362	427,923	2,682,299	3,725,584
	1933	320,801	462,638	2,110,906	2,894,345
Forest Products -	1921	507,386	143,126	189,361	839,873
	1922	483,208	110,360	181,959	775,527
	1923	552,178	126,673	266,149	945,000
	1924	644,608	150,634	291,884	1,087,126
	1925	598,154	167,701	285,598	1,051,453
	1926	647,320	189,097	284,348	1,120,765
	1927	730,380	241,447	321,887	1,293,714
	1928	825,650	231,663	370,257	1,427,570
	1929	714,088	199,040	355,719	1,268,847
	1930	693,452	218,402	278,117	1,189,971
	1931	456,657	211,406	148,110	816,173
	1932	423,465	195,072	148,462	766,999
	1933	517,212	256,400	89,399	863,011
Manufactures and Miscellaneous -	1921	696,529	500,360	569,178	1,766,067
	1922	784,421	512,447	544,204	1,841,072
	1923	760,895	561,867	516,570	1,839,332
	1924	630,396	443,640	677,257	1,751,293
	1925	695,349	528,220	711,502	1,935,071
	1926	828,209	597,339	783,256	2,208,804
	1927	832,001	686,045	847,101	2,365,147
	1928	1,029,068	805,950	1,064,826	2,896,844
	1929	1,055,371	784,442	976,180	2,815,993
	1930	879,164	701,902	912,481	2,493,547
	1931	609,232	480,064	659,273	1,748,569
	1932	423,332	399,655	471,255	1,294,242
	1933	372,161	396,522	430,554	1,199,237

TABLE 2.--Railway Revenue Freight Tonnages, Prairie Provinces, 1921-33--Cont'd.

	Year	Manitoba	Saskatchewan	Alberta	Prairie Provinces
<u>Freight Loaded on Cars</u>					
Grand Total	1921	4,226,111	6,237,633	6,649,712	17,113,456
	1922	5,300,698	7,726,651	6,939,778	19,967,127
	1923	4,745,136	8,043,665	7,987,487	20,776,288
	1924	4,828,316	6,532,582	8,396,552	19,757,450
	1925	5,528,298	7,969,973	8,205,474	21,703,745
	1926	5,853,115	7,858,992	8,739,912	22,452,019
	1927	5,687,243	7,976,146	9,500,986	23,164,375
	1928	6,598,800	11,010,947	12,594,399	30,204,146
	1929	5,282,661	6,468,854	9,834,364	21,585,879
	1930	4,925,274	6,664,711	8,657,966	20,247,951
	1931	3,763,454	6,147,783	8,052,695	17,963,932
	1932	3,308,791	6,095,923	9,133,978	18,538,692
	1933	3,037,628	5,642,056	7,175,141	15,854,825
<u>Freight Unloaded from Cars</u>					
Agricultural Products	1921	1,112,954	691,938	675,297	2,480,189
	1922	1,115,433	478,685	905,870	2,499,988
	1923	1,062,516	437,397	867,260	2,367,173
	1924	1,132,231	560,102	910,479	2,602,812
	1925	877,415	436,892	907,940	2,222,247
	1926	972,129	687,268	976,363	2,635,760
	1927	1,100,740	558,938	1,020,647	2,680,325
	1928	1,418,539	906,716	1,156,272	3,481,527
	1929	898,397	794,847	977,535	2,670,779
	1930	672,063	862,543	850,454	2,385,060
	1931	656,350	827,410	798,555	2,282,315
	1932	622,932	984,460	743,465	2,350,857
	1933	558,118	614,380	772,127	1,944,625
Animal Products	1921	162,649	53,170	152,797	368,616
	1922	262,901	51,388	183,902	498,191
	1923	272,545	49,929	162,581	485,055
	1924	298,157	51,877	189,466	539,500
	1925	307,611	54,506	204,817	566,934
	1926	279,475	70,732	190,455	540,662
	1927	274,454	75,176	170,569	520,199
	1928	238,891	79,722	163,859	482,472
	1929	226,732	77,181	153,461	457,374
	1930	141,455	57,528	108,996	307,979
	1931	159,592	49,813	88,331	297,736
	1932	135,714	41,921	81,536	259,171
	1933	146,226	46,827	76,678	269,731
Mine Products	1921	1,500,038	1,459,897	1,177,125	4,137,060
	1922	1,563,752	1,536,788	1,119,310	4,219,850
	1923	1,610,058	1,477,309	1,126,425	4,213,792
	1924	1,414,517	1,452,920	1,398,252	4,265,689
	1925	1,821,534	1,537,005	1,358,187	4,716,726
	1926	1,879,139	1,617,410	1,548,860	5,045,409
	1927	2,179,520	1,802,185	1,493,835	5,475,540
	1928	2,189,899	2,103,698	1,666,837	5,960,434
	1929	2,354,284	2,108,476	1,775,558	6,238,318
	1930	2,099,669	2,021,952	1,634,411	5,756,032
	1931	1,844,793	1,482,177	1,354,256	4,681,226
	1932	1,460,850	1,620,881	1,114,820	4,196,551
	1933	1,104,119	1,494,644	689,069	3,287,832

TABLE 2.--Railway Revenue Freight Tonnages, Prairie Provinces, 1921-33 - Cont'd.

	Year	Manitoba	Saskatchewan	Alberta	Prairie Provinces
<u>Freight Unloaded from Cars</u>					
Forest Products -	1921	582,583	323,526	419,075	1,325,184
	1922	560,556	298,943	336,643	1,196,142
	1923	539,441	374,304	398,387	1,312,132
	1924	484,320	306,310	360,104	1,150,734
	1925	519,001	366,746	414,341	1,300,088
	1926	575,304	442,797	481,583	1,499,684
	1927	678,943	486,456	502,930	1,668,329
	1928	715,899	570,316	648,425	1,934,640
	1929	700,826	433,504	581,702	1,716,032
	1930	619,533	335,882	392,030	1,347,445
	1931	425,281	245,045	232,042	903,268
	1932	436,828	240,695	220,015	897,538
	1933	476,794	289,575	147,942	914,311
Manufactures and Miscellaneous -	1921	967,760	814,069	746,555	2,528,384
	1922	1,002,107	759,848	711,877	2,473,832
	1923	926,682	824,416	741,080	2,492,178
	1924	806,582	694,614	707,697	2,208,893
	1925	903,372	846,145	842,297	2,591,814
	1926	1,079,647	1,092,804	970,349	3,142,800
	1927	1,068,065	1,211,250	1,062,162	3,341,477
	1928	1,325,532	1,542,857	1,422,713	4,291,102
	1929	1,353,259	475,713	1,415,539	3,244,511
	1930	1,142,384	1,155,329	1,134,622	3,432,335
	1931	787,788	747,953	798,250	2,333,991
	1932	668,230	615,535	650,074	1,933,839
	1933	583,614	538,555	553,307	1,675,476
Grand Total -	1921	4,325,984	3,342,600	3,170,849	10,839,433
	1922	4,504,749	3,125,652	3,257,602	10,888,003
	1923	4,411,242	3,163,355	3,295,733	10,870,330
	1924	4,135,807	3,065,823	3,565,998	10,767,628
	1925	4,428,933	3,241,294	3,727,582	11,397,809
	1926	4,785,694	3,911,011	4,137,610	12,834,315
	1927	5,301,722	4,134,005	4,250,143	13,685,870
	1928	5,888,760	5,203,309	5,058,106	16,150,175
	1929	5,533,497	4,889,721	4,903,795	15,327,013
	1930	4,675,104	4,433,234	4,120,513	13,228,851
	1931	3,873,804	3,353,298	3,271,434	10,498,536
	1932	3,324,554	3,503,492	2,809,910	9,637,956
	1933	2,868,871	2,983,981	2,239,123	8,091,975
<u>Net Imports (+) Net Exports (-) Via Railways</u>					
Agricultural Products -	1921	- 1,169,343	- 4,635,591	- 2,000,874	- 7,805,808
	1922	- 2,049,798	- 6,302,472	- 2,012,911	-10,365,181
	1923	- 1,507,686	- 6,614,550	- 3,192,148	-11,314,384
	1924	- 1,598,071	- 5,009,422	- 3,413,594	-10,021,087
	1925	- 2,228,653	- 6,437,986	- 2,929,992	-11,596,631
	1926	- 2,277,032	- 5,915,299	- 3,127,111	-11,319,442
	1927	- 1,610,527	- 5,980,857	- 3,691,310	-11,282,694
	1928	- 1,998,556	- 8,490,047	- 6,109,841	-16,598,444
	1929	- 1,168,987	- 4,102,788	- 3,578,448	- 8,850,222
	1930	- 1,522,248	- 4,176,388	- 3,081,426	- 8,780,062
	1931	- 899,648	- 4,057,816	- 3,598,808	- 8,556,272
	1932	- 1,073,610	- 3,974,934	- 4,873,875	- 9,922,419
	1933	- 1,109,213	- 3,783,683	- 3,538,492	- 8,431,388

TABLE 2.—Railway Revenue Freight Tonnages, Prairie Provinces, 1921-33 - Cont'd.

	Year	Manitoba	Saskatchewan	Alberta	Prairie Provinces
			Net Imports (+) Net Exports (-)	Via Railways	
Animal Products	1921	19,714	28,383	79,188	127,285
	1922	23,957	74,820	148,051	198,914
	1923	12,026	86,041	109,546	183,561
	1924	1,624	107,202	159,783	265,361
	1925	20,264	100,267	177,362	297,893
	1926	10,795	87,649	172,834	271,278
	1927	27,972	81,113	129,338	238,423
	1928	19,424	71,255	114,690	205,369
	1929	21,421	80,700	129,675	231,796
	1930	11,310	57,714	103,547	172,571
	1931	31,184	79,007	121,419	231,610
	1932	14,376	71,958	133,086	219,420
	1933	13,897	81,606	156,985	252,488
Mine Products	1921	942,502	1,274,332	1,805,892	410,942
	1922	934,858	1,340,309	1,843,571	431,596
	1923	1,008,716	1,310,101	1,746,808	572,009
	1924	888,040	1,243,215	1,355,837	775,418
	1925	1,020,682	1,292,604	1,630,076	683,210
	1926	1,040,984	1,305,802	1,656,685	690,101
	1927	1,068,351	1,449,615	1,826,299	691,667
	1928	1,121,227	1,678,104	1,950,817	848,514
	1929	1,156,618	1,678,620	1,887,788	947,450
	1930	1,094,087	1,431,718	1,688,534	837,271
	1931	894,002	1,039,910	1,283,943	649,969
	1932	845,488	1,192,958	1,567,479	470,967
	1933	783,318	1,032,006	1,421,837	393,487
Forest Products	1921	75,197	180,400	229,714	485,311
	1922	77,348	188,583	154,684	420,615
	1923	12,737	247,631	132,238	367,132
	1924	160,288	155,676	68,220	636,608
	1925	79,153	199,045	128,743	248,635
	1926	72,016	253,700	197,235	378,919
	1927	51,437	245,009	181,043	374,615
	1928	109,751	338,653	278,168	507,070
	1929	13,262	234,464	225,983	447,185
	1930	73,919	117,480	113,913	157,474
	1931	91,376	34,539	83,932	87,095
	1932	13,363	45,623	71,553	130,539
	1933	40,418	33,175	58,543	51,300
Manufactures and Miscellaneous	1921	271,231	313,709	177,377	762,317
	1922	217,686	247,401	167,673	632,760
	1923	165,787	262,549	224,510	652,846
	1924	176,186	250,974	30,440	457,600
	1925	208,023	317,925	130,795	656,743
	1926	251,438	495,465	187,093	933,996
	1927	236,064	525,205	215,061	976,330
	1928	296,464	736,907	360,887	1,394,258
	1929	297,888	691,271	439,359	1,428,518
	1930	263,220	453,427	222,141	938,788
	1931	178,556	267,889	138,977	585,422
	1932	244,898	215,880	178,819	639,597
	1933	211,453	142,033	122,753	476,239

TABLE 2.--Railway Revenue Freight Tonnages, Prairie Provinces, 1921-33.- Cont'd.

	Year	Manitoba	Saskatchewan	Alberta	Prairie Provinces
			Net Imports (+)	Net Exports (-)	Via Railways
Grand Total	1921	+ 99,873	- 2,895,033	- 3,478,863	- 6,274,023
	1922	- 795,949	- 4,600,999	- 3,682,176	- 9,079,124
	1923	- 333,894	- 4,880,310	- 4,691,754	- 9,905,958
	1924	- 692,509	- 3,466,759	- 4,830,554	- 8,989,822
	1925	- 1,099,365	- 4,728,679	- 4,477,892	-10,305,936
	1926	- 1,067,421	- 3,947,981	- 4,602,302	- 9,617,704
	1927	- 385,521	- 3,842,141	- 5,250,843	- 9,478,505
	1928	- 710,040	- 5,807,638	- 7,536,293	-14,053,971
	1929	+ 250,836	- 1,579,133	- 4,930,569	- 6,258,866
	1930	- 250,170	- 2,231,477	- 4,537,453	- 7,019,100
	1931	+ 110,350	- 2,794,485	- 4,781,261	- 7,465,396
	1932	+ 15,763	- 2,592,431	- 6,324,068	- 8,900,736
	1933	- 168,757	- 2,658,075	- 4,936,018	- 7,762,850

TABLE 3.--Freight Loaded and Unloaded on Cars and Net Export or Import Via Rail in the Prairie Provinces, 1928-33.

Commodity	Year	Freight Loaded at Stations in the Prairie Provinces	Freight Unloaded at Stations in the Prairie Provinces	Net Import (+) Net Export (-) Via Rail	Commodity	Year	Freight Loaded at Stations in the Prairie Provinces	Freight Unloaded at Stations in the Prairie Provinces	Net Import (+) Net Export (-) Via Rail
		Tons	Tons	Tons			Tons	Tons	
Agricultural Products-					Agricultural Products-				
Wheat	1928	16,250,059	2,203,629	-14,046,430	Flax	1928	106,820	20,832	- 85,988
	1929	8,560,530	1,382,865	- 7,177,665		1929	56,118	21,670	- 34,448
	1930	8,699,963	1,122,518	- 7,577,445		1930	94,323	11,372	- 82,951
	1931	8,322,675	976,710	- 7,345,965		1931	59,161	10,669	- 48,492
	1932	9,937,591	1,112,667	- 8,824,924		1932	50,988	9,329	- 41,659
	1933	8,295,628	963,608	- 7,332,020		1933	36,491	8,065	- 28,426
Corn	1928	18,232	7,987	- 10,245	Other Grain	1928	6,913	8,348	+ 1,435
	1929	2,372	8,503	+ 6,131		1929	6,295	7,684	+ 1,389
	1930	4,851	4,647	- 204		1930	4,522	5,554	+ 1,032
	1931	4,785	3,328	- 1,457		1931	5,121	6,772	+ 1,651
	1932	3,454	2,445	- 1,009		1932	6,345	5,329	- 1,016
	1933	2,128	1,350	- 778		1933	3,407	4,796	+ 1,389
Oats	1928	1,002,213	382,481	- 619,732	Flour	1928	614,035	213,491	- 400,544
	1929	661,867	293,687	- 368,180		1929	619,874	222,297	- 397,577
	1930	477,257	281,025	- 196,232		1930	454,628	185,758	- 268,870
	1931	759,585	382,983	- 376,602		1931	449,320	162,377	- 286,943
	1932	702,856	407,983	- 294,873		1932	448,821	159,225	- 289,596
	1933	582,587	269,082	- 313,505		1933	476,767	148,664	- 328,103
Barley	1928	1,169,418	163,310	- 1,006,108	Other Mill Products	1928	424,732	98,751	- 325,981
	1929	760,121	175,621	- 584,500		1929	443,121	92,813	- 350,308
	1930	539,275	179,012	- 360,263		1930	346,955	90,704	- 256,251
	1931	419,659	180,127	- 239,532		1931	345,931	86,806	- 259,125
	1932	348,263	129,170	- 219,113		1932	328,581	81,120	- 247,461
	1933	324,510	116,670	- 207,840		1933	319,029	77,240	- 241,789
Rye	1928	270,912	15,056	- 255,856	Hay and Straw	1928	101,523	101,036	- 487
	1929	156,395	13,069	- 143,326		1929	121,035	118,947	- 2,088
	1930	194,718	8,685	- 186,033		1930	175,083	169,825	- 5,258
	1931	114,560	13,370	- 101,190		1931	158,625	143,956	- 14,669
	1932	81,823	4,591	- 77,232		1932	148,378	139,926	- 8,452
	1933	67,078	3,735	- 63,343		1933	66,690	62,136	- 4,554

TABLE 3.--Freight Loaded and Unloaded on Cars and Net Export or Import
Via Rail in the Prairie Provinces, 1928-33 - Cont'd.

Commodity	Year	Freight Loaded at	Freight Unloaded at	Net Import	Commodity	Year	Freight Loaded at	Freight Unloaded at	Net Import	
		Stations	Stations	(/) Net			Stations	Stations	(/) Net	
		in the Prairie Provinces	in the Prairie Provinces	Export (-) Via Rail			in the Prairie Provinces	in the Prairie Provinces	Export (-) Via Rail	
		Tons	Tons	Tons			Tons	Tons	Tons	
Agricultural Products -					Animal Products -					
Cotton	1928	-	1,568	/	1,568	Horses	1928	55,329	47,353	- 7,976
	1929	93	1,129	/	1,036		1929	69,392	53,665	- 15,727
	1930	90	812	/	722		1930	50,520	35,045	- 15,475
	1931	418	1,454	/	1,036		1931	42,518	28,160	- 14,358
	1932	10	1,001	/	991		1932	28,477	21,717	- 6,760
	1933	-	738	/	738		1933	25,187	16,081	- 9,106
Apples (fresh)	1928	2,932	54,763	/	51,831	Cattle and Calves	1928	355,297	270,401	- 84,896
	1929	2,604	48,912	/	46,308		1929	324,833	249,191	- 75,642
	1930	1,373	43,226	/	41,853		1930	189,474	141,421	- 48,053
	1931	1,090	50,905	/	49,815		1931	213,956	146,426	- 67,530
	1932	986	47,015	/	46,029		1932	162,649	110,654	- 51,995
	1933	401	42,312	/	41,911		1933	189,522	128,098	- 61,424
Other Fruit (fresh)	1928	6,479	90,390	/	83,911	Sheep	1928	20,062	15,368	- 4,694
	1929	5,074	95,870	/	90,796		1929	22,519	17,899	- 4,620
	1930	3,220	78,610	/	75,390		1930	20,965	16,738	- 4,227
	1931	1,410	70,147	/	68,737		1931	19,916	16,505	- 3,411
	1932	1,020	59,211	/	58,191		1932	16,933	12,211	- 4,722
	1933	715	54,367	/	53,652		1933	18,518	12,683	- 5,835
Potatoes	1928	20,789	22,917	/	2,128	Hogs	1928	138,336	112,547	- 25,789
	1929	14,734	58,471	/	43,737		1929	138,930	99,769	- 39,161
	1930	14,107	33,837	/	19,730		1930	111,898	83,503	- 28,395
	1931	21,769	20,509	-	1,260		1931	119,967	80,633	- 39,334
	1932	12,677	12,644	-	33		1932	131,937	92,193	- 39,744
	1933	12,636	13,297	/	661		1933	128,740	91,912	- 36,828
Other Fresh Vegetables	1928	5,881	38,027	/	32,146	Dressed Meats (fresh)	1928	39,281	7,054	- 32,227
	1929	3,647	46,017	/	42,370		1929	42,421	8,394	- 34,027
	1930	4,795	42,265	/	37,470		1930	31,042	8,958	- 22,084
	1931	6,735	38,714	/	31,979		1931	40,492	4,481	- 36,011
	1932	4,177	25,936	/	21,759		1932	32,937	3,211	- 29,726
	1933	3,344	25,148	/	21,804		1933	41,983	1,957	- 40,026
Other Agricultural Products	1928	79,033	58,941	-	20,092	Dressed Meats (cured or salted)	1928	12,567	2,117	- 10,450
	1929	107,121	83,223	-	23,898		1929	15,780	2,153	- 13,627
	1930	149,962	127,210	-	22,752		1930	11,636	1,153	- 10,483
	1931	167,743	133,488	-	34,255		1931	10,958	1,325	- 9,633
	1932	197,286	153,265	-	44,021		1932	19,862	1,172	- 18,690
	1933	184,602	153,417	-	31,185		1933	28,574	1,343	- 27,231
Total Agricultural Products	1928	20,079,971	3,481,527	-	16,598,444	Other Packing, House Products	1928	22,908	7,301	- 15,607
	1929	11,521,001	2,670,778	-	8,850,223		1929	26,023	6,410	- 19,613
	1930	11,165,122	2,385,060	-	8,780,062		1930	20,794	3,537	- 17,257
	1931	10,838,587	2,282,315	-	8,556,272		1931	21,177	2,469	- 18,708
	1932	12,273,276	2,350,857	-	9,922,419		1932	32,980	2,380	- 30,600
	1933	10,376,013	1,944,625	-	8,431,388		1933	29,736	2,616	- 27,120

TABLE 3.--Freight Loaded and Unloaded on Cars and Net Export or Import
Via Rail in the Prairie Provinces, 1928-33 - Cont'd.

Commodity	Year	Freight Loaded at	Freight Unloaded	Net Import (+) Net Export (-) Via Rail	Commodity	Year	Freight Loaded at	Freight Unloaded	Net Import (+) Net Export (-) Via Rail
		Stations	at				Stations	at	
		in the Prairie Provinces	in the Prairie Provinces				in the Prairie Provinces	in the Prairie Provinces	
		Tons	Tons	Tons			Tons	Tons	Tons
Animal Products -					Mine Products -				
Poultry	1928	4,480	1,688	- 2,792	Anthracite Coal	1928	237	83,673	+ 83,436
	1929	5,264	1,840	- 3,424		1929	1,178	39,357	+ 38,179
	1930	4,804	1,430	- 3,374		1930	-	26,914	+ 26,914
	1931	6,537	1,579	- 4,958		1931	45	20,471	+ 20,426
	1932	7,542	2,256	- 5,286		1932	-	21,113	+ 21,113
	1933	7,773	2,377	- 5,396		1933	73	12,215	+ 12,142
Eggs	1928	6,004	3,552	- 2,452	Bituminous Coal	1928	366,571	1,224,874	+ 858,303
	1929	7,987	4,196	- 3,791		1929	323,298	924,561	+ 601,263
	1930	8,716	4,270	- 4,446		1930	302,986	709,963	+ 406,977
	1931	11,937	4,724	- 7,213		1931	308,802	646,488	+ 337,686
	1932	9,068	3,250	- 5,818		1932	307,529	584,486	+ 276,957
	1933	9,775	3,381	- 6,394		1933	321,906	502,050	+ 180,144
Butter and Cheese	1928	11,998	10,488	- 1,510	Lignite Coal	1928	3,169,836	2,315,407	- 854,429
	1929	15,883	10,576	- 5,307		1929	3,102,141	2,646,362	- 455,779
	1930	15,208	9,270	- 5,938		1930	2,767,806	2,489,432	- 278,374
	1931	25,546	9,485	- 16,061		1931	2,130,090	1,919,928	- 210,162
	1932	22,432	8,432	- 14,000		1932	2,536,148	2,285,123	- 251,025
	1933	23,065	7,657	- 15,208		1933	2,291,603	2,066,346	- 225,257
Wool	1928	2,155	178	- 1,977	Coke	1928	6,533	82,199	+ 75,666
	1929	2,784	309	- 2,475		1929	5,947	109,833	+ 103,886
	1930	2,091	404	- 1,687		1930	4,541	100,545	+ 96,004
	1931	2,973	188	- 2,785		1931	2,922	68,028	+ 65,106
	1932	2,259	41	- 2,218		1932	3,964	67,152	+ 63,188
	1933	3,392	281	- 3,111		1933	55,368	72,722	+ 17,354
Hides and Leather	1928	16,102	2,598	- 13,504	Iron Ore	1928	25	643	+ 618
	1929	13,898	1,536	- 12,362		1929	198	587	+ 389
	1930	11,238	1,222	- 10,016		1930	149	503	+ 354
	1931	10,167	1,006	- 9,161		1931	-	501	+ 501
	1932	8,460	808	- 7,652		1932	25	275	+ 250
	1933	12,511	580	- 11,931		1933	-	190	+ 190
Other Animal Products	1928	3,322	1,827	- 1,495	Other Ores and Concentrates	1928	10	300	+ 290
	1929	3,456	1,436	- 2,020		1929	159	465	+ 306
	1930	2,464	1,028	- 1,436		1930	1,076	332	- 744
	1931	3,202	755	- 2,447		1931	31,876	31,959	+ 83
	1932	3,055	846	- 2,209		1932	28,862	28,580	- 282
	1933	3,443	565	- 2,878		1933	723	973	+ 250
Total Animal Products	1928	687,841	482,472	-205,369	Base Bullion and Matte	1928	-	252	+ 252
	1929	689,170	457,374	-231,796		1929	113	-	- 113
	1930	480,550	307,979	-172,571		1930	-	-	-
	1931	529,346	297,736	-231,610		1931	18,955	2,112	- 16,843
	1932	478,591	259,171	-219,420		1932	33,933	411	- 33,522
	1933	522,219	269,731	-252,488		1933	23,733	506	- 23,227

TABLE 3.--Freight Loaded and Unloaded on Cars and Net Export or Import
Via Rail in the Prairie Provinces, 1928-33 - Cont'd.

Commodity	Year	Freight			Commodity	Year	Freight		
		Loaded at	Unloaded	Net Import			Loaded at	Unloaded	Net Import
		Stations in the Prairie Provinces	Stations in the Prairie Provinces	(£) Net Export (-) Via Rail			Stations in the Prairie Provinces	Stations in the Prairie Provinces	(£) Net Export (-) Via Rail
		Tons	Tons	Tons			Tons	Tons	Tons
Mine Products -					Forest Products -				
Clay, Gravel, Sand, Stone (crushed)					Logs, Posts, Poles, Cordwood				
	1928	1,512,214	1,537,487	£ 25,273		1928	582,520	669,619	£ 87,099
	1929	1,758,798	1,757,106	- 1,692		1929	619,977	705,355	£ 85,378
	1930	1,741,324	1,742,147	£ 823		1930	541,366	634,806	£ 93,440
	1931	1,442,781	1,466,611	£ 23,830		1931	473,274	511,906	£ 38,632
	1932	745,240	744,024	- 1,216		1932	602,519	610,077	£ 7,558
	1933	158,253	171,461	£ 13,208		1933	684,811	681,641	- 3,170
Slate, Dimension or Block Stone					Ties				
	1928	34,248	27,489	- 6,759		1928	11,802	26,847	£ 15,045
	1929	54,327	23,552	- 30,775		1929	9,264	12,779	£ 3,515
	1930	44,165	38,875	- 5,290		1930	4,607	8,624	£ 4,017
	1931	23,006	25,486	£ 2,480		1931	34,658	34,113	- 545
	1932	12,106	6,888	- 5,218		1932	4,335	5,118	£ 783
	1933	1,239	2,131	£ 892		1933	2,777	4,585	£ 1,808
Crude Petroleum					Pulpwood				
	1928	12,646	608,087	£ 595,441		1928	457,328	180,698	- 276,630
	1929	20,746	632,685	£ 611,939		1929	305,747	145,765	- 159,982
	1930	9,894	569,966	£ 560,072		1930	353,249	162,064	- 191,185
	1931	8,890	411,420	£ 402,530		1931	117,067	24,867	- 92,200
	1932	2,931	348,610	£ 345,679		1932	5,385	2,547	- 2,738
	1933	4,649	369,100	£ 364,451		1933	50,841	4,228	- 46,613
Asphaltum					Lumber, Timber, Box, Crate and Cooper- age Material				
	1928	2,017	13,616	£ 11,599		1928	359,352	926,957	£ 667,605
	1929	17,535	43,549	£ 26,014		1929	321,856	827,317	£ 505,461
	1930	20,218	25,244	£ 5,026		1930	271,241	523,949	£ 252,708
	1931	19,340	34,529	£ 15,189		1931	182,477	317,043	£ 134,566
	1932	7,351	10,767	£ 3,416		1932	144,114	262,626	£ 118,512
	1933	6,376	8,560	£ 2,184		1933	108,459	205,547	£ 97,088
Salt					Other Forest Products				
	1928	2,553	58,006	£ 55,453		1928	16,568	30,519	£ 13,951
	1929	1,558	46,201	£ 44,643		1929	12,003	24,816	£ 12,813
	1930	1,165	44,759	£ 43,594		1930	19,508	18,002	- 1,506
	1931	801	46,783	£ 45,982		1931	8,697	15,339	£ 6,642
	1932	2,126	49,253	£ 47,127		1932	10,646	17,170	£ 6,524
	1933	1,857	52,940	£ 51,083		1933	16,123	18,310	£ 2,187
Other Mine Products					Total Forest Products				
	1928	5,030	8,401	£ 3,371		1928	1,427,570	1,934,640	£ 507,070
	1929	4,870	14,060	£ 9,190		1929	1,248,847	1,716,032	£ 447,185
	1930	25,437	7,352	- 18,085		1930	1,189,971	1,347,445	£ 157,474
	1931	43,749	6,910	- 36,839		1931	816,173	903,268	£ 87,095
	1932	45,369	49,869	£ 4,500		1932	766,999	897,538	£ 130,539
	1933	28,565	28,638	£ 73		1933	863,011	914,311	£ 51,300
Total									
	1928	5,111,920	5,960,434	£ 848,514					
	1929	5,290,868	6,238,318	£ 947,450					
	1930	4,918,761	5,756,032	£ 837,271					
	1931	4,031,257	4,681,226	£ 649,969					
	1932	3,725,584	4,196,551	£ 470,967					
	1933	2,894,345	3,287,832	£ 393,487					

TABLE 3.--Freight Loaded and Unloaded on Cars and Net Export or Import
Via Rail in the Prairie Provinces, 1928-33 - Cont'd.

Commodity	Year	Freight Loaded at	Freight Unloaded at	Net Import	Commodity	Year	Freight Loaded at	Freight Unloaded at	Net Import
		Stations	Stations	(+) Net			Stations	Stations	(+) Net
		in the Prairie Provinces	in the Prairie Provinces	(-) Net Export (-) Via Rail			in the Prairie Provinces	in the Prairie Provinces	(-) Net Export (-) Via Rail
		Tons	Tons	Tons			Tons	Tons	Tons
Manufactures and Miscellaneous - Refined Petroleum and its Products	1928	522,908	853,868	+ 330,960	Manufactures and Miscellaneous - Brick and Artificial Stone	1928	138,590	144,571	+ 5,981
	1929	526,814	911,646	+ 384,832		1929	161,014	167,493	+ 6,479
	1930	594,434	889,033	+ 294,599		1930	96,545	106,144	+ 9,599
	1931	416,909	664,398	+ 247,489		1931	37,816	40,104	+ 2,288
	1932	345,803	593,242	+ 247,439		1932	17,226	20,791	+ 3,565
	1933	326,837	490,094	+ 163,257		1933	12,631	15,118	+ 2,487
Sugar	1928	9,390	104,116	+ 94,726	Lime and Plaster	1928	77,564	72,721	- 4,843
	1929	6,278	98,810	+ 92,532		1929	83,137	76,449	- 6,688
	1930	15,050	99,622	+ 84,572		1930	57,392	49,270	- 8,122
	1931	19,367	95,579	+ 76,212		1931	39,672	30,954	- 8,718
	1932	20,063	97,785	+ 77,722		1932	26,750	21,646	- 5,104
	1933	17,630	83,403	+ 65,773		1933	25,937	18,019	- 7,918
Iron, pig and Bloom	1928	1,869	21,234	+ 19,365	Sewer Pipe and Drain Tile	1928	17,248	26,032	+ 8,784
	1929	871	3,352	+ 2,481		1929	19,770	27,225	+ 7,455
	1930	604	6,118	+ 5,514		1930	16,692	20,594	+ 3,902
	1931	6,199	7,619	+ 1,420		1931	12,473	11,538	- 935
	1932	143	863	+ 720		1932	5,362	6,489	+ 1,127
	1933	77	676	+ 599		1933	1,866	2,078	+ 212
Rails and Fastenings	1928	15,836	28,359	+ 12,523	Agricultural Imple- ments and Vehicles other than Automobiles	1928	110,581	300,251	+ 189,670
	1929	4,583	9,636	+ 5,053		1929	73,687	215,784	+ 142,097
	1930	2,551	14,201	+ 11,650		1930	55,531	127,684	+ 72,153
	1931	3,666	6,717	+ 3,051		1931	20,699	26,558	+ 5,859
	1932	966	2,527	+ 1,561		1932	16,626	26,507	+ 9,881
	1933	562	1,397	+ 835		1933	15,868	30,951	+ 15,083
Bar and Sheet Iron, Structural Iron and Iron Pipe	1928	47,720	122,520	+ 74,800	Automobiles and Auto Trucks	1928	15,450	102,736	+ 87,286
	1929	56,683	208,479	+ 151,796		1929	40,340	114,033	+ 73,693
	1930	48,166	132,722	+ 84,556		1930	19,782	48,783	+ 29,001
	1931	28,030	63,141	+ 35,111		1931	7,544	18,043	+ 10,499
	1932	11,718	26,695	+ 14,977		1932	3,060	14,263	+ 11,203
	1933	6,243	17,231	+ 10,988		1933	2,208	13,966	+ 11,758
Castings, Machinery and Boilers	1928	38,854	106,302	+ 67,448	Household Goods	1928	43,745	46,394	+ 2,649
	1929	29,885	101,359	+ 71,474		1929	36,613	38,737	+ 2,124
	1930	23,949	71,860	+ 47,911		1930	31,554	34,928	+ 3,374
	1931	15,024	34,946	+ 19,922		1931	39,665	41,027	+ 1,362
	1932	8,246	12,881	+ 4,635		1932	29,797	29,701	- 96
	1933	7,041	9,497	+ 2,456		1933	37,570	37,002	- 568
Cement	1928	253,112	219,192	- 33,920					
	1929	312,323	287,763	- 24,560					
	1930	260,603	244,647	- 19,956					
	1931	204,260	154,363	- 49,897					
	1932	67,856	61,154	- 6,702					
	1933	50,696	43,156	- 7,540					

TABLE 3.—Freight Loaded and Unloaded on Cars and Net Export or Import
Via Rail in the Prairie Provinces, 1928-33 - Cont'd.

Commodity	Year	Freight Loaded at Stations in the Prairie Provinces	Freight Unloaded at Stations in the Prairie Provinces	Net Import (+) Net Export (-) Via Rail	Commodity	Year	Freight Loaded at Stations in the Prairie Provinces	Freight Unloaded at Stations in the Prairie Provinces	Net Import (+) Net Export (-) Via Rail
		Tons	Tons	Tons			Tons	Tons	Tons
Manufactures and Miscellaneous - Furniture	1928	6,914	27,286	+ 20,372	Manufactures and Miscellaneous - Canned Meats	1928	1,639	4,927	+ 3,288
	1929	6,649	25,323	+ 18,674		1929	2,045	3,690	+ 1,645
	1930	3,778	15,572	+ 11,794		1930	1,378	2,011	+ 633
	1931	2,846	10,412	+ 7,566		1931	62	1,033	+ 971
	1932	2,907	8,474	+ 5,567		1932	x	x	x
	1933	3,731	9,764	+ 6,033		1933	x	x	x
Liquors and Beverages	1928	102,059	118,381	+ 16,322	Canned Goods (all Canned Food Products other than Meat)	1928	6,737	71,673	+ 64,936
	1929	97,918	111,453	+ 13,535		1929	6,334	73,134	+ 66,800
	1930	69,987	80,884	+ 10,897		1930	5,805	60,703	+ 54,898
	1931	40,135	47,731	+ 7,596		1931	1,906	46,620	+ 44,714
	1932	27,675	34,265	+ 6,590		1932	2,397	46,405	+ 44,008
	1933	22,741	28,794	+ 6,053		1933	973	51,410	+ 50,437
Fertilizers, All Kinds	1928	8,533	15,117	+ 6,584	Other Manufactures and Miscellaneous	1928	450,648	801,145	+ 350,497
	1929	11,781	10,812	- 969		1929	415,946	738,538	+ 322,592
	1930	4,812	6,563	+ 1,751		1930	413,980	587,001	+ 173,021
	1931	3,311	4,293	+ 982		1931	288,040	442,076	+ 154,036
	1932	2,606	9,087	+ 6,481		1932	208,143	366,088	+ 157,945
	1933	3,895	5,261	+ 1,366		1933	254,666	320,083	+ 65,417
Paper, Printed Matter, Books	1928	72,646	53,198	- 19,448	Merchandise (All L.C.L. Freight)	1928	916,053	1,034,221	+ 118,169
	1929	83,503	56,834	- 26,669		1929	805,526	946,526	+ 140,726
	1930	62,759	48,938	- 13,821		1930	681,071	771,369	+ 90,298
	1931	67,943	39,728	- 28,215		1931	476,485	538,916	+ 62,431
	1932	15,311	45,352	+ 30,041		1932	469,594	504,597	+ 35,003
	1933	6,077	43,894	+ 37,817		1933	387,995	448,421	+ 60,426
Wood Pulp	1928	18,398	2,941	- 15,457	Total	1928	2,896,844	4,291,102	+ 1,394,258
	1929	12,865	3,831	- 9,034		1929	2,815,993	4,244,511	+ 1,428,518
	1930	8,345	800	- 7,545		1930	2,493,547	3,432,335	+ 938,788
	1931	4,801	1,059	- 3,742		1931	1,748,569	2,333,991	+ 585,422
	1932	3,428	632	- 2,796		1932	1,294,242	1,933,839	+ 639,597
	1933	3,717	436	- 3,281		1933	1,199,237	1,675,476	+ 476,239
Fish (fresh frozen, cured, etc.)	1928	20,351	13,917	- 6,434	Grand Total	1928	30,204,146	16,150,175	- 14,053,971
	1929	21,428	13,878	- 7,550		1929	21,585,879	15,327,013	- 6,258,866
	1930	18,779	12,888	- 5,891		1930	20,247,951	13,228,851	- 7,019,100
	1931	11,714	7,136	- 4,580		1931	17,963,932	10,498,536	- 7,465,396
	1932	8,565	4,395	- 4,170		1932	18,538,692	9,637,956	- 8,900,736
	1933	10,276	4,825	- 5,451		1933	15,854,825	8,091,975	- 7,762,850

x Included under dressed meats.

VALUE OF THE EXTERNAL TRADE OF THE CANADIAN PRAIRIE PROVINCES.

The statistics of the trade of the Canadian Prairie Provinces, as set out in the preceding section were derived from monthly reports furnished by the railways, showing tons of freight loaded and unloaded in these provinces. These reports do not show the value of the goods themselves but merely the weights. Considerable information regarding the values of commodities at the point of production is available in the Bureau of Statistics from returns made by crop correspondents, industrial concerns, etc. and by applying these values to the quantities shown in the railway returns it is possible to obtain some idea of the approximate valuation of the commodities moving to and from the Prairie Provinces.

It must be emphasized that, owing to the nature of the material dealt with, the attainment of even approximate accuracy in such a computation is extremely difficult. The record of goods handled by the railways includes certain broad classifications and the quantities are expressed in tonnages necessitating translation, sometimes on an arbitrary basis, into quantities used in commerce in order to obtain values. Further, not only must average values be used in most cases but at certain important points reliable data are lacking, more especially in regard to the commodities imported for use in the Prairie Provinces. While no claim for statistical accuracy is made in the following study of the value of the external trade of the Prairie Provinces it is thought that the setting out of the more important basic data will serve a useful purpose by permitting those interested to examine the situation for themselves. This investigation is meant to be suggestive rather than final.

Of the commodities sent out of the Prairie Provinces, agricultural or vegetable products form the largest group in value as in quantity accounting for \$443,000,000 in 1928 and \$128,000,000 in 1933. Wheat is the largest single commodity. The quantity shipped out had a value at the farm based on farm prices as returned by crop correspondents of the Bureau of \$106,725,000 in 1933 and of \$362,412,000 in 1928.

Details of the amounts making up the agricultural export total are as follows:

	<u>1 9 2 8</u>	<u>1 9 3 3</u>
	\$	\$
Wheat	362,412,000	106,725,000
Oats	13,900,000	2,961,000
Barley	21,708,000	1,731,000
Rye	7,006,000	645,000
Flax	4,819,000	1,099,000
Corn	78,000	3,000
Flour and other milled products	33,239,000	14,939,000
Other agricultural products	255,000	326,000
	<u>443,417,000</u>	<u>128,429,000</u>

Shipments of commodities based on animal husbandry come next in importance showing a gross value of approximately \$37,000,000 in 1928 and \$25,000,000 in 1933. The principal items making up these totals are as follows:

	<u>1 9 2 8</u>	<u>1 9 3 3</u>
	\$	\$
Cattle and calves	11,132,000	2,993,000
Hogs	3,330,000	2,593,000
Sheep	1,878,000	825,000
Horses	376,000	383,000
Preserved Meats	8,535,000	6,726,000
Other packing house products	1,379,000	1,085,000
Poultry and eggs	2,324,000	1,421,000
Dairy products	1,153,000	6,334,000
Hides and leather	5,401,000	1,991,000
Other animal products, as wool, etc.	1,280,000	1,081,000
	<u>36,788,000</u>	<u>25,432,000</u>

Shipments, as above shown, based on the two branches of field crops and animal husbandry account for \$480,205,000 in 1928 and \$153,856,000 in 1933 out of the respective totals of \$488,093,000 and \$162,790,000. The balance is accounted for by the three groups of mine products, forest products and manufactured and miscellaneous products as follows:

<u>Mine Products</u>		
	<u>1 9 2 8</u>	<u>1 9 3 3</u>
	\$	\$
Lignite coal	3,631,000	901,000
Base bullion and matte	-	6,916,000
Slate, dimension or block stone	304,000	-
	<u>3,935,000</u>	<u>7,817,000</u>
<u>Forest Products</u>		
	<u>1 9 2 8</u>	<u>1 9 3 3</u>
	\$	\$
Pulpwood	1,452,000	139,000
Cordwood	-	34,000
	<u>1,452,000</u>	<u>173,000</u>
<u>Manufactured and Miscellaneous</u>		
	<u>1 9 2 8</u>	<u>1 9 3 3</u>
	\$	\$
Cement	306,000	77,000
Lime and plaster	58,000	79,000
Wood pulp	464,000	72,000
Fish (fresh frozen, cured, etc.)	901,000	654,000
Other	772,000	57,000
	<u>2,501,000</u>	<u>939,000</u>

While agricultural products form the largest group of shipments from the Prairie Provinces, they, conversely, form the smallest group of shipments into this region amounting to \$8,289,000 in 1928 and to \$4,875,000 in 1933 made up chiefly as follows:

	<u>1 9 2 8</u>	<u>1 9 3 3</u>
	\$	\$
Apples	2,568,000	1,428,000
Other fresh fruit	3,500,000	2,000,000
Fresh vegetables	1,547,000	813,000
Cheese	-	471,000
Other	674,000	163,000
	<u>8,289,000</u>	<u>4,875,000</u>

Imports of mine products are valued at \$22,638,000 in 1928 and at \$7,860,000 in 1933 including:

	<u>1 9 2 8</u>	<u>1 9 3 3</u>
	\$	\$
Anthracite coal	1,501,000	208,000
Bituminous coal	9,596,000	2,153,000
Coke	980,000	360,000
Crude petroleum	9,685,000	4,638,000
Salt	499,000	388,000
Asphalt	166,000	33,000
Clay, gravel, sand and stone	100,000	51,000
Other mine products	111,000	29,000
	<u>22,638,000</u>	<u>7,860,000</u>

Imports of forest products are valued at \$16,998,000 in 1928 and at \$1,887,000 in 1933 made up of:

	<u>1928</u>	<u>1933</u>
	\$	\$
Lumber, timber, box, crate and cooperage material ...	13,352,000	1,262,000
Ties	165,000	15,000
Logs, posts, poles, etc.	1,388,000	391,000
Other forest products	2,093,000	219,000
	<u>16,998,000</u>	<u>1,887,000</u>

The largest group comprising manufactured and miscellaneous articles accounts for over 80 p.c. of the total value of all shipments into the Prairie Provinces. The principal items making up this total are as follows:

	<u>1928</u>	<u>1933</u>
	\$	\$
Refined petroleum and products	11,584,000	5,506,000
Sugar	10,821,000	7,660,000
Iron, pig and bloom	503,000	14,000
Rails and fastenings	626,000	42,000
Bar and sheet iron, structural	5,607,000	809,000
Iron and iron pipe	106,000	40,000
Bricks and artificial stone	8,431,000	307,000
Castings, machinery and boilers, sewer pipe and drain tile	196,000	4,000
Agricultural implements and vehicles other than automobiles	113,802,000	7,541,000
Automobiles and auto trucks	87,286,000	11,758,000
Household goods	530,000	-
Furniture	24,446,000	6,033,000
Liquor and other beverages	5,092,000	1,888,000
Fertilizers	263,000	41,000
Paper, wall board, etc.	-	1,474,000
Canned goods	13,645,000	10,000,000
Other manufactures and miscellaneous	42,066,000	6,542,000
Merchandise (All L.C.L. freight)	<u>14,180,000</u>	<u>6,043,000</u>
	<u>339,178,000</u>	<u>65,702,000</u>

Thus the commodities sent out of the Prairie Provinces were valued at \$488,000,000 in 1928 and at \$163,000,000 in 1933, while the commodities brought in were valued at \$387,000,000 in 1928 and at \$80,000,000 in 1933.

The values used above for both exports and imports are computed at the point of origin. In addition to the amounts received by the primary producers, however, further value was added to the commodities produced within the Prairie Provinces by the activities of those engaged in the storage, insurance, merchandising of these commodities, etc., and their transportation to the border of the area. From information available as to the costs of handling grain, it is estimated that such charges amounted to about 14 p.c. of the values at the point of origin in 1928 and to about 24 p.c. in 1933, and the total values of the commodities sent out of the prairie region are, therefore, estimated at \$556,423,000 in 1928 and \$201,860,000 in 1933. Similarly in the case of the imports, charges for transportation, etc., necessary to bring the goods to the border of the prairie area should be added to the values as computed at the point of origin. These charges are estimated to have amounted to around 20 p.c. of the values as above stated in 1928 and to about 30 p.c. in 1933, making the total estimated cost of the goods brought to the prairie region for consumption therein \$464,524,000 in 1928 and \$100,405,000 in 1933.

Thus there would appear to have been a trade balance in favour of the Prairie Provinces of \$91,899,000 in 1928 and of \$101,455,000 in 1933. While freight, insurance, and similar charges have already been provided for there are other charges for "invisible" exports and imports for which allowance must be made as is done in studies of the international trade balance of complete political or national entities. Some of the items, for example, in a complete statement of the exports from the Prairie Provinces of Canada would include (1) Payments of interest and

sinking fund sent outside the area; (2) Payments of dividends on securities of Prairie companies to persons resident outside the prairie region; (3) Remittances of cash by immigrant residents; (4) Expenditures made outside the provinces by travellers, students, etc., ordinarily resident in and deriving their income from the Prairie Provinces; (5) Payments to outside insurance companies; (6) The export of capital accompanying emigration; (7) Capital sent away from the Prairies for investment. Similarly the following items would, *inter alia*, have to be included in a complete statement of the values imported into the Prairie Provinces: (1) Earnings on capital invested outside by residents of the Prairie Provinces; (2) Expenditures by travellers in the Prairie Provinces from outside districts; (3) Cash remittances to the Prairies by friends of residents; (4) Insurance payments to the Prairie district; (5) Capital brought in by immigrants; (6) Capital imported for investment. These items, while to some extent offsetting each other, account for the services and other utilities representing the trade balances set out above.

INTERNAL TRADE OF THE PRAIRIE PROVINCES

Census of Merchandising and Service Establishments

A comprehensive survey of the business carried on by trading and service establishments was carried out in connection with the seventh decennial census in 1931. Summary data of the results are presented herewith.*

Wholesale and Other Bulk or Non-Retail Merchandising:- The wholesale field as defined for the purposes of the census, embraces many types of establishments other than those generally classed as wholesale houses. In order to give a rough indication of the amount of pre-retail business, bulk merchandising establishments have been divided into two classes "wholesalers proper" (establishments carrying on the more conventional forms of wholesale trading) and "other bulk or non-retail distributors" (including establishments engaged in handling or arranging for the sales of commodities or the transfer of rights etc. on a non-retail basis whether for domestic or foreign trade).

The total net sales of 4,272 wholesale establishments in the Prairie Provinces in 1930 amounted to \$995,757,900 as compared with sales \$3,325,210,300 in 13,140 establishments for all Canada. Employees numbered 20,559 in the Prairie Provinces and 90,564 in all Canada. For further details see tables 1 and 2.

It will be noted that, while the province of Manitoba had 20.12 p.c. of the total sales of all bulk merchandising, the business of wholesalers proper in Manitoba was only 7.15 p.c. of the total for Canada. This marked difference is due to the influence of the grain trade, which is such an important factor in the commerce of that province. The trade in grain is carried on mainly by establishments classified under "other bulk distributors".

TABLE 1.--Bulk Merchandising (Wholesale and Other Non-Retail) in the Prairie Provinces and Canada, 1930.

All Wholesale Establishments						
Province	Establish- ments	All Employees	Salaries and Wages	Net Sales	Proportion of Total Net Sales	Stocks on Hand End of Year (at cost)
	No.	No.	\$	\$	p.c.	\$
Manitoba	1,307	9,362	15,490,600	669,076,000	20.12	28,561,500
Saskatchewan	1,659	5,441	8,393,300	137,112,000	4.12	24,209,300
Alberta	1,306	5,756	9,738,200	189,569,900	5.70	23,560,400
Prairie Provinces	4,272	20,559	33,622,100	995,757,900	29.94	76,331,200
Canada	13,140	90,564	146,346,600	3,325,210,300	100.00	297,221,100
Wholesalers Proper						
Manitoba	349	4,132	6,303,400	79,393,100	7.15	15,546,000
Saskatchewan	178	2,265	3,430,800	52,114,100	4.69	9,905,100
Alberta	248	2,411	4,068,000	64,091,200	5.77	11,249,500
Prairie Provinces	775	8,808	13,802,200	195,598,400	17.61	36,700,600
Canada	5,108	48,851	74,927,400	1,111,319,200	100.00	167,804,700

*More detailed information is available in the various Census of Merchandising bulletins issued by the Bureau of Statistics.

TABLE 2.--Wholesale Trade in the Prairie Provinces by Types of Establishment, 1930.

Type of Establishment	Number of Establishments	Number of Employees	Salaries and Wages \$	Net Sales (1930) \$	Stocks on Hand, End of Year (at Cost) \$
Wholesalers Proper -					
Wholesale merchants	647	7,314	11,177,000	169,594,500	26,542,400
Exporters	12	76	91,000	1,979,300	129,000
Importers	85	1,252	2,189,500	17,806,800	8,446,900
Cash and carry wholesalers ...	2)	30	52,300	2,512,900	1,000
Drop shippers	12)				
Supply and machinery distributors	17	136	292,400	3,704,900	1,581,300
Total, Wholesalers Proper	775	8,808	13,802,200	195,598,400	36,700,600
Other Bulk or Non-Retail Distributors -					
Bulk tank stations	2,509	3,439	4,949,600	65,399,300	9,783,600
District sales offices	10	236	496,500	10,956,300	519,000
General sales offices	4	103	160,600	1,152,300	173,700
Manufacturers' sales branches.	397	4,321	7,647,100	120,608,200	23,414,700
Export merchants (on own account).....	8	297	536,500	77,098,100	1,802,300
Auction companies	3	12	17,800	939,100	6,100
Brokers	29	71	156,100	11,682,900	77,600
Brokers cash grain	20	15	27,000	61,710,600	-
Commission merchants	77	340	626,200	60,708,800	330,900
Export brokers	3)	10	27,900	15,091,800	-
Export commission houses	1)				
Import commission merchants ..	5	18	42,200	2,909,300	-
Import manufacturers' agents .	21)	62	112,300	2,338,700	110,600
Import selling agents	1)				
Manufacturers' agents	176	467	835,300	33,899,700	473,100
Purchasing agents	2)	20	34,000	1,337,300	12,400
Resident buyers	1)				
Selling agents	18	50	127,000	3,790,500	11,600
City buyers of farm products .	25	40	48,600	1,182,800	87,600
Country buyers of farm products	58	14	12,400	1,845,700	13,800
Co-operative marketing associations	9	33	49,500	1,345,700	-
Co-operative sales agencies ..	9	250	507,000	172,027,100	-
Elevators (independent)	17	30	34,800	1,274,000	66,800
Elevators (line)	25	1,042	2,145,800	124,581,700	618,500
Chain store warehouses	16	555	707,100	20,985,700	1,775,600
Film exchanges	19	182	230,100	1,887,500	36,300
Warehouses (distributing)	38	140	282,000	5,299,500	316,400
Others	2	4	6,500	106,900	-
Total, Other Bulk or Non-Retail Distributors	3,497	11,751	19,819,900	800,159,500	39,630,600
GRAND TOTAL	4,272	20,559	33,622,100	995,757,900	76,331,200

Retail Merchandising and Services:- Details of retail merchandising and service establishments are presented in tables 3-6.

The line of demarcation between these two classes of retailing cannot be sharply drawn. In many service establishments, especially those of the repair group, the retail sale of commodities is also carried on. Conversely a great many stores, chiefly engaged in retail merchandising, have service departments for making alterations and repairs.

for hair dressing and other personal service, for cleaning, decorating, fur storage, etc. Establishments where both these functions are carried on have been classified according to the function which provided the largest receipts.

The total sales made by 26,292 retail merchandising establishments in the Prairie Provinces in 1930 were \$54,962,100 as compared with sales of \$2,755,569,900 by 125,003 establishments in all Canada. In addition to the sales made by these stores the manufacturing bakeries and dairies reported retail sales of \$14,583,286. It should be noted that in the provincial figures no allowance is made for the mail order or other sales outside the province.

Service Establishments:- The 9,032 service establishments in the Prairie Provinces from which reports were secured had receipts of \$40,214,900 in 1930. Receipts in 42,223 service establishments in all Canada amounted to \$249,455,900. The professional services, such as medicine, dentistry or law, were not included in the census, nor were the building trades, such as carpentry, tinsmithing, etc. A special report is being prepared for hotels and the figures for these establishments are not included in the tables shown here.

Among service establishments, the amusements group was the most important, followed by domestic service, which includes laundries and cleaning, pressing and dyeing shops. For further details see tables 3-6.

TABLE 3.--Summary of Retail Merchandise Trade, Prairie Provinces and Canada, 1930.

Province	Stores	Pro- portion of Total Stores	Employees		Salaries and Wages		Net Sales	Pro- portion of Net Sales	Stocks on Hand at End of Year (at Cost)
			Full Time	Part Time	Full Time	Part Time			
	No.	p.c.	No.	No.	\$	\$	\$	p.c.	\$
Manitoba	6,859	5.49	17,806	1,956	18,945,300	652,500	189,243,900	6.87	28,253,700
Saskatchewan	10,841	8.67	13,097	2,528	14,170,600	745,700	189,181,100	6.86	43,153,400
Alberta	8,592	6.87	13,077	1,944	14,947,000	616,100	176,537,100	6.41	35,800,500
Prairie Provinces	26,292	21.03	43,980	6,428	48,062,900	2,014,300	554,962,100	20.14	107,207,600
Canada	125,003	100.00	238,683	36,776	247,370,500	10,485,100	2,755,569,900	100.00	483,627,500

TABLE 4.--Retail Merchandising - Number of Stores and Sales by Chief Groups, 1930, Prairie Provinces and Canada.

Group		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Food group	(Stores No.	2,249	2,046	2,153	6,448	44,665
	(Sales \$	27,410,900	25,877,700	29,137,600	82,426,200	615,476,100
Country general stores	(Stores No.	852	1,641	1,200	3,693	11,915
	(Sales \$	15,542,700	37,710,000	28,756,900	82,009,600	228,803,800
General merchandise group	(Stores No.	87	71	93	251	2,974
	(Sales \$	64,344,000	20,102,400	23,198,500	107,644,900	451,542,500
Automotive group	(Stores No.	758	1,382	1,115	3,255	13,194
	(Sales \$	20,605,500	27,048,700	31,120,100	78,774,300	381,959,300
Apparel group	(Stores No.	432	373	489	1,294	10,474
	(Sales \$	9,597,200	10,231,900	11,087,700	30,916,800	219,968,600
Building materials group	(Stores No.	417	1,276	762	2,455	6,035
	(Sales \$	12,173,400	22,612,200	15,574,000	50,359,600	162,237,100
Furniture and household group .	(Stores No.	101	142	156	399	3,188
	(Sales \$	3,740,800	4,087,300	5,353,600	13,181,700	101,665,900
Restaurants, cafeterias and eating places	(Stores No.	338	506	483	1,327	5,609
	(Sales \$	5,553,300	5,551,900	5,996,400	17,101,600	75,977,100
Other retail stores	(Stores No.	1,484	3,333	2,018	6,835	25,343
	(Sales \$	29,004,200	35,507,600	25,548,800	90,060,600	506,126,900
Secondhand group	(Stores No.	141	71	123	335	1,606
	(Sales \$	1,271,900	451,400	763,500	2,486,800	11,812,600
TOTAL	(Stores No.	6,859	10,841	8,592	26,292	125,003
	(Sales \$	189,243,900	189,181,100	176,537,100	554,962,100	2,755,569,900

TABLE 5.--Summary of Retail Services, Prairie Provinces and Canada, 1930.

	Estab- lish- ments	Proportion of Estab- lishments	Employees		Salaries and Wages		Receipts	Proportion of Receipts	Stocks on Hand End of Year (at Cost)
			Full Time	Part Time	Full Time	Part Time			
	No.	p.c.	No.	No.	\$	\$	\$	p.c.	\$
Manitoba	2,493	5.91	3,976	772	4,235,100	218,300	16,437,800	6.59	338,800
Saskatchewan	3,658	8.66	1,936	492	1,923,200	156,700	10,342,600	4.15	389,500
Alberta	2,881	6.82	2,799	476	3,062,400	149,600	13,434,500	5.38	298,100
Prairie Provinces	9,032	21.39	8,711	1,740	9,220,700	524,600	40,214,900	16.12	1,026,400
Canada	42,223	100.00	55,257	8,984	58,217,700	3,014,200	249,455,900	100.00	5,762,000

TABLE 6.--Retail Services - Establishments and Receipts by Chief Groups, 1930, Prairie Provinces and Canada.

Group		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
Amusement and recreation group .	(Establishments No.	220	469	330	1,019	3,300
	(Receipts \$	4,002,900	2,918,300	3,279,600	10,200,800	53,231,500
Business services group	(Establishments No.	26	18	27	71	476
	(Receipts \$	1,080,600	254,400	808,300	2,143,300	29,409,300
Domestic services group	(Establishments No.	300	318	323	941	4,884
	(Receipts \$	2,754,900	1,318,700	1,861,200	5,934,800	36,711,400
Educational services group	(Establishments No.	14	13	14	41	169
	(Receipts \$	309,900	67,300	109,700	486,900	1,856,100
Personal services group	(Establishments No.	560	683	594	1,837	10,853
	(Receipts \$	1,340,900	1,394,600	1,339,400	4,074,900	24,460,500
Photography	(Establishments No.	54	56	60	170	857
	(Receipts \$	318,700	268,100	363,100	949,900	5,078,600
Undertaking and burial	(Establishments No.	34	50	54	138	860
	(Receipts \$	422,200	394,100	498,800	1,315,100	9,299,800
Repair and service shops	(Establishments No.	881	1,335	952	3,168	14,167
	(Receipts \$	1,761,800	1,743,900	1,899,900	5,405,600	30,675,300
Storage and transportation group	(Establishments No.	293	506	380	1,179	5,346
	(Receipts \$	3,461,700	1,631,600	2,809,200	7,902,500	50,053,400
Miscellaneous services	(Establishments No.	111	210	147	468	1,581
	(Receipts \$	484,200	351,600	465,300	1,301,100	7,780,000
	(Establishments No.	2,493	3,658	2,881	9,032	42,223
	(Receipts \$	15,937,800	10,342,600	13,434,500	39,714,900	248,555,900

CHAPTER V.--WEALTH AND INCOME OF THE PRAIRIE PROVINCES.

Wealth— An estimate of the national wealth of Canada and of the amounts thereof contributed by each of the Prairie Provinces is presented in table 1. "National Wealth" in this analysis is a concrete concept and includes the farms, factories, equipment, merchandise in stock, real estate, roads, highways, developed resources and the thousand and one material things which we as a nation possess.

Great difficulty arises when we try to reduce all the things which go to make up this wealth (things which once created are themselves subject to violent change) to a common denominator for statistical purposes. Estimates of national wealth must always be expressed in terms of the national currency and thus, normally, in terms of gold dollars. Yet the purchasing power of the currency unit is always fluctuating and since 1929 had at one point increased by more than 50 p.c. (February, 1933) in terms of wholesale prices. Even in 1930 the average index of wholesale prices was down by nearly 10 p.c. from 1929, while in December of that year the index was 19 p.c. lower than in December 1929. The index continued to decline until February 1933, and even though there has been some improvement since then, in December 1934 it was still almost 26 p.c. below the same month in 1929.

The effect of such drastic reductions in prices is first felt by the commodities which are being currently produced and through these commodities diminishes the dollar value of production and consequently the national income of a country where most people are producers. Ultimately a persistent decline of this character affects the capital values of real estate, buildings, machinery, etc. and its influence is then felt in a reduction in the national wealth as stated in dollars. The capital value of our national wealth has not yet been finally re-adjusted for the fluctuations in prices which have marked the past five or six years and any attempt to estimate the wealth of Canada must be open to serious error until a fairly stable level of prices has been reached. The 1929 estimate which is considered to represent fairly well values in that year is, therefore, the latest which has been compiled by the Bureau of Statistics.

TABLE 1.--Estimate of the Wealth of the Prairie Provinces and Canada, 1929.
"000" omitted

Classification of Wealth	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	\$	\$	\$	\$	\$
Farm values (land, buildings, implements, machinery, livestock).	569,841	1,413,120	875,110	2,858,071	6,308,353
Agricultural products in the possession of farmers and traders.	119,472	299,304	223,246	642,022	1,631,124
Total agricultural wealth	689,313	1,712,424	1,098,356	3,500,093	7,939,477
Mines (capital employed).....	18,020	6,098	142,943	167,061	867,021
Forests (estimated value of accessible raw materials, pulpwood and capital invested in woods operations).....	24,500	67,700	97,500	189,700	1,877,000
Fisheries (capital invested in boats, gear, etc. in primary operations).....	1,317	122	547	1,986	33,935
Central electric stations (capital invested in equipment, materials, etc.)	25,734	7,445	13,256	46,435	554,327
Manufactures (machinery and tools and estimate for capital in rural lands and buildings, duplication excluded)	31,460	6,842	26,803	65,105	1,418,040
Manufactures (materials on hand and stocks in process, duplication excluded)	24,847	13,258	18,318	56,423	837,805
Construction, custom and repair (estimate of capital invested in machinery and tools, materials, etc.)	9,652	8,772	7,640	26,064	137,685
Trading establishments (estimate of the value of furniture, fixtures, delivery equipment and materials on hand)	95,053	82,203	70,819	248,075	1,136,291
Steam railways (investment in road and equipment)	329,669	595,845	425,560	1,351,074	3,153,351
Electric railways (investment in road and equipment)	16,364	4,322	6,265	26,951	240,111
Telephones (cost of property and equipment)	20,347	31,351	25,284	76,982	291,589
Urban real property (assessed valuations and exempted property and estimate for under valuation by assessors and for roads, sewers, etc.)	479,322	246,594	256,795	982,711	8,251,011
Canals (amount expended on construction to March 31, 1930)	-	-	-	-	241,946
Harbours (investment in)	4,703	(	938	)	5,641
Shipping (including aircraft)	1,636	168	146	1,950	149,306
Imported merchandise in store (estimated at one-half imports during 1929)	28,475	17,188	19,564	65,227	649,477
Automobiles (estimate of the value of automobiles registered) .	49,774	82,322	63,310	195,406	758,424
Highways, etc.	13,600	25,000	29,000	67,600	364,896

TABLE 1.--Estimate of the Wealth of the Prairie Provinces and of Canada, 1929 - Cont'd.
"000" omitted

Classification of Wealth	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	\$	\$	\$	\$	\$
Household furnishings, clothing, etc. (estimated from production and trade statistics	92,832	121,317	90,424	304,573	1,370,000
Specie, coin and other currency held by the Government, chartered banks and the general public (a)	13,622	17,802	13,269	44,693	201,000
TOTAL	1,970,240	3,047,242	2,406,268	7,423,750	30,840,210
PERCENTAGES	6.39	9.88	7.80	24.07	100.00

(a) The specie holdings are distributed among the several provinces according to population.

The total estimated capital wealth of the Prairie Provinces in 1929 amounted to \$7,424,000,000 or \$3,308 per capita. Of this total, \$1,970,000,000 or \$2,910 per capita was allocated to Manitoba; \$3,047,000,000 or \$3,451 per capita to Saskatchewan and \$2,406,000,000 or \$3,518 per capita to Alberta. The national wealth of Canada in 1929 was \$30,840,000,000 or \$3,076 per capita, so that the wealth of the Prairie Provinces was 24.07 p.c. of that of the Dominion as a whole.

The capital invested in farms, including implements and livestock, was the largest item, aggregating for the three provinces \$2,858,071,000 or 38.4 p.c. of the whole. The value of agricultural production in 1929, \$642,022,000, is included as representing the average stocks of agricultural goods in the possession of farmers and traders and the amount invested in the preparation for the new crop. Thus the agricultural wealth of the three Prairie Provinces may be totalled at \$3,500,093,000 or 47 p.c. of the entire estimated capital wealth of that part of Canada.

The wealth invested in steam railways, computed from the cost of road and equipment and distributed by provinces on the basis of mileage, constituted the next largest item, amounting to \$1,351,074,000 or 18.1 p.c. of the total.

The third largest element in total estimated capital wealth was urban real property. This includes the assessed valuations of taxed and exempted property, to which was added one-third to provide for under-valuation by assessors and for roads, bridges, sewers and other public works. The estimated value as based on returns for 1929 received in the Dominion Bureau of Statistics from the municipalities was \$982,711,000 or 13.2 p.c. of the whole.

Other important items include the capital invested in household furnishings and other personal property, amounting to \$304,573,000 or 4.1 p.c.; trading establishments \$248,075,000 or 3.3 p.c.; automobiles \$195,406,000 or 2.6 p.c.; forest industries \$189,700,000 or 2.5 p.c., and capital employed in mines totalling \$167,061,000 or 2.3 p.c.

On the basis of the estimated population in 1929 of 2,244,000, the per capita wealth invested in farms and equipment in the Prairie Provinces was \$1,609; in railways \$621; in urban real property \$452; in household furnishings, clothing, etc., \$140.

Income:- We have no direct statistics of total income in Canada. "The precise statistical measurement of the national income is a matter of insurmountable difficulty and the most indefatigable research into all the relevant statistics in order to establish a figure of national income must always leave a considerable margin of error." (1) In Canada the principal method of obtaining an approximation to the aggregate of the national income has been to take the value of the annual industrial production (including such processes as the growing of crops, extraction of minerals, capture of fish, conversion of water power into electric current, manufacturing etc. - in economic phrase, the creation of "form" utilities) and to add thereto the estimated value of the production of those engaged in transportation, merchandising, etc. (which add to commodities already worked up into form the further utilities of "place" "time" and "possession") and of those engaged in the personal and profession services, such as those of the teacher and the doctor, which are not concerned with commodities at all but are nevertheless essential to any civilized society (in economic language engaged in the creation of "service" utilities). The same method has been followed in arriving at the estimated income of the Prairie Provinces indicated below.

(1) The National Income of Canada p. 4 - study published by the Dominion Bureau of Statistics.

As shown elsewhere (Chapter III) the net value of production in the Prairie Provinces was in 1929, \$661,507,297; in 1930, \$460,963,873; in 1931, \$361,035,520 and in 1932, \$375,327,680.

Of the 895,833 persons reported as gainfully employed in the 1931 census, some 296,000 or roughly one-third were reported as engaged in transportation, trade, finance, service, etc. and hence are not represented in the above figures of production.

Upon the assumption that this one-third of the gainfully employed in Canada is, proportionately, as productive on the average as those engaged in the production of "form" utilities, it is estimated that the production of the Prairie Provinces represented created values of approximately \$992,261,000 in 1929; \$691,446,000 in 1930; \$541,553,000 in 1931 and \$562,992,000 in 1932.

In order to arrive at the figures of the national income certain deductions from the above amounts must be made - deductions especially connected with the maintenance of the industrial equipment of the country providing not only for depreciation but for obsolescence or replacement by new and improved apparatus. These probably amount to around 5 p.c. of the annual value of productive activities. The income of the Prairie people is therefore estimated at somewhere in the neighbourhood of \$942,648,000 or \$420 per capita in 1929; \$656,874,000 or \$286 per capita in 1930; \$514,475,000 or \$219 per capita in 1931 and \$534,842,000 or \$225 per capita in 1932.

Income Tax Statistics:- Tables 2 and 3, herewith, show income reported to the income tax authorities for each of the Prairie Provinces during the years 1922-33.* Such data are often used in comparing the prosperity of different localities and when used with care they have a value for this purpose. It is necessary, however, to observe certain cautions, for example:-

- (1) The income reported to the income tax authorities is mainly taxable income, i.e. income of persons or corporations which exceeds the limit of exemption. This limit has frequently been changed, with the result that the income passing under survey changes also.† Persons whose incomes are too small to be taxable are not ordinarily required to make returns. Under the present law, a community containing a few rich men and many poor ones would appear more prosperous by this criterion than one containing a large population of families with moderate incomes.
- (2) Much of the income received in kind is not reported to the income tax authorities, e.g. home-grown produce consumed on the farm. Similarly the person who owns a house and rents it to another must report the net rent as a part of his income; but the person who owns a house and occupies it himself is not required to pay income tax on its rental value.

*It should be remembered that the bulk of the income tax is collected in April, May and June, the first quarter of the fiscal year on the income of the then preceding calendar year. Thus the figures of income assessed for the fiscal year ended March 1, 1933 apply in the main to the calendar year, 1931, the income tax due on these incomes being collected mainly in April, May and June 1932. Similarly the figures of income assessed in the fiscal year 1932 apply for the most part to incomes earned in the calendar year 1930 and so on.

†In Canada on account of the relatively high standard of living of our people the exemption limit has been comparatively high. Under the income tax legislation of 1926-1931 the exemption limit for individual income tax was \$3,000 for married and \$1,500 for single persons in respect of incomes of the years 1925 to 1930 both inclusive. In the session of 1932, however, the exemption limit was reduced to \$2,400 for married and \$1,200 for single persons in respect of incomes of 1931, while in the 1933 session a further reduction was made to \$2,000 for married and \$1,000 for single persons in respect of incomes of 1932. The effect of the former reduction is reflected in the large increase in the number of income tax payers in the lower income classes in 1932-1933, while the effect of the latter reduction will be seen when income tax statistics for 1933-1934 become available. The general rate of corporation income tax which, after an exemption of \$2,000 had been 10 p.c. on incomes under \$5,000 and 10½ p.c. on incomes \$5,000 or over from 1919 to 1924 was reduced to 9 p.c. on incomes of 1925, 8.1 p.c. on incomes of 1926 and 8 p.c. on incomes of 1927, 1928 and 1929. It was raised again to 10 p.c. on incomes of 1930, to 11 p.c. on incomes of 1931 of \$5,000 or less and 11.55 p.c. on incomes in excess of \$5,000 and to 12½ p.c. on incomes of 1932 with an extra 1 p.c. where corporations and joint stock companies filed a return consolidating their profit or loss with that of their subsidiary or subsidiaries. Again in respect of the income of 1932 the \$2,000 exemption hitherto afforded corporations was removed. These 1933 changes in rates, however, do not affect the statistics for 1932-1933 here presented.

(3) There is doubtless considerable understatement of income.

(4) Corporate incomes are usually reported at their head offices although they may be earned and distributed elsewhere.

(5) A country may collect income taxes on income arising within its borders which is subsequently paid to foreign capitalists or workers. Thus the difference between the income of Ontario per capita and that of Saskatchewan may be partly due to investments of foreign (extra-provincial) capital in Ontario, and may be partly counter-balanced by interest payments due from Ontario enterprises to the owners of capital.

TABLE 2.—Amount of Income Assessed for the Purpose of the Income War Tax by Provinces, 1922-33.

	1922	1923	1924	1925	1926	1927
	\$	\$	\$	\$	\$	\$
Prince Edward Island	3,707,988	2,618,325	2,301,305	1,590,134	1,841,389	1,564,607
Nova Scotia	51,057,049	35,671,544	33,785,631	22,613,331	19,997,318	14,586,443
New Brunswick	35,238,694	28,450,436	22,809,357	19,500,707	19,098,829	14,727,822
Quebec	362,078,282	270,549,115	296,331,345	288,731,449	267,852,358	214,172,270
Ontario	598,456,379	469,654,705	473,015,674	436,971,432	466,678,836	330,875,841
Manitoba	134,039,184	86,665,622	92,286,842	73,497,253	67,156,023	50,118,276
Saskatchewan	89,942,132	56,568,615	50,778,824	40,415,300	35,848,382	27,080,457
Alberta	66,912,332	49,736,832	53,310,467	41,874,721	42,586,566	29,766,879
British Columbia	119,716,747	90,871,659	81,525,976	72,390,078	80,619,635	60,602,251
Yukon	1,380,383	1,621,072	1,882,450	1,575,843	1,431,310	690,045
CANADA	1,462,529,170	1,092,407,925	1,108,027,871	999,160,248	1,003,110,646	744,184,891

	1928	1929	1930	1931	1932	1933
	\$	\$	\$	\$	\$	\$
Prince Edward Island	1,906,145	2,201,506	2,293,916	2,238,100	1,981,321	2,015,664
Nova Scotia	19,187,670	20,418,952	20,183,735	22,954,032	22,748,690	23,699,351
New Brunswick	15,855,847	16,638,582	16,743,421	17,441,133	15,941,318	16,253,444
Quebec	247,108,323	342,206,962	402,108,906	374,899,266	234,313,011	259,566,516
Ontario	501,698,431	554,038,353	599,709,588	634,211,212	508,414,692	448,057,907
Manitoba	73,008,012	69,131,365	83,659,145	84,061,015	56,619,647	53,808,386
Saskatchewan	39,130,763	45,770,126	42,729,044	38,709,748	24,279,759	19,765,936
Alberta	37,164,202	37,692,873	47,251,766	79,999,021	45,115,980	32,757,215
British Columbia	103,587,321	106,218,237	109,367,418	115,849,332	82,033,481	87,124,464
Yukon	1,586,234	1,085,310	1,146,505	1,115,781	1,158,321	1,042,677
CANADA	1,040,232,948	1,195,402,266	1,325,193,444	1,371,478,640	992,606,220	944,091,564

TABLE 3.—Income of Individuals Assessed for the Purpose of the Income War Tax by Provinces, 1928-33.

	1928	1929	1930	1931	1932	1933
	\$	\$	\$	\$	\$	\$
Prince Edward Island	1,704,679	1,932,509	2,019,170	1,975,294	1,774,280	1,679,911
Nova Scotia	14,927,676	15,883,789	16,062,824	18,169,557	18,062,374	19,855,859
New Brunswick	12,496,800	12,878,786	12,839,892	13,887,278	12,859,395	14,127,246
Quebec	166,196,154	196,166,825	269,579,137	218,672,254	157,759,210	198,638,008
Ontario	298,123,890	315,986,647	342,428,388	349,140,109	312,283,792	298,022,196
Manitoba	26,855,698	20,346,424	21,001,429	52,566,144	43,858,932	44,557,080
Saskatchewan	3,972,881	14,934,335	14,321,610	33,050,316	20,761,370	18,517,056
Alberta	27,641,932	26,926,541	37,791,317	55,787,536	31,352,985	28,037,752
British Columbia	51,713,614	62,630,785	64,222,844	71,399,754	60,439,705	61,085,731
Yukon	1,102,792	1,000,895	907,419	1,066,442	955,214	1,023,149
CANADA	604,736,116	668,687,536	781,174,030	815,714,684	660,107,257	685,543,980

TABLE 3.--Income of Individuals Assessed for the Purpose of the Income War Tax by Provinces, 1928-33 - Cont'd.
Assessment Per Capita.

	1928	1929	1930	1931	1932	1933
	\$	\$	\$	\$	\$	\$
Prince Edward Island	19.59	22.21	22.95	22.45	20.16	19.09
Nova Scotia	28.99	30.84	31.19	35.28	35.14	38.71
New Brunswick	31.56	32.36	32.02	34.37	31.67	34.63
Quebec	63.85	73.83	99.29	78.89	55.84	69.12
Ontario	94.22	98.16	104.46	104.72	92.23	86.84
Manitoba	42.03	31.25	31.63	77.65	63.66	63.65
Saskatchewan	48.39	17.76	16.61	37.43	22.99	20.08
Alberta	45.46	42.54	57.43	81.56	44.28	39.30
British Columbia	85.34	100.53	100.19	108.35	89.41	88.02
Yukon	275.70	250.22	226.85	266.61	238.80	255.79
CANADA	63.99	69.39	79.43	81.34	64.67	66.07

INDEXES OF PROSPERITY

As akin to the subject of wealth and income, certain other data may be employed for comparing the general level of prosperity in the Prairie Provinces with that of the rest of Canada.

Use of Motor Vehicles:- Motor vehicle registrations are an indirect index of prosperity. Such figures must, of course, be interpreted in the light of local considerations such as the proportion of rural population prevented by lack of roads or other considerations from using motor cars also the presence of urban populations among whom commercial vehicles are much in use. In conservative communities, too, the use of automobiles may lag behind the development of the wealth of the community.

Table 4 shows the number of motor vehicles (including commercial and dealers' cars) registered in each of the Prairie Provinces with the average number of persons per motor vehicle and also the number of passenger automobiles this forming, perhaps, a better index for the purpose in view.

The 1931 census returns show the number of automobiles on farms. In that year there were 25,588 passenger automobiles on 54,199 farms in Manitoba; 65,093 on 136,472 farms in Saskatchewan; 42,811 on 97,408 farms in Alberta and 321,306 on 728,623 farms in all Canada. Of all passenger cars registered in Manitoba, 39 p.c. were on farms; in Saskatchewan, 71 p.c.; in Alberta, 54 p.c. and in all Canada, 31 p.c.

TABLE 4.--Number of Motor Vehicles Registered, Prairie Provinces and Canada, 1911-33.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
1911	2,436	1,304	1,631	5,371	21,519
1915	9,225	10,225	5,832	25,282	89,944
1916	12,765	15,900	9,516	38,181	123,464
1917	17,507	32,505	20,624	70,636	197,799
1918	24,012	50,531	29,300	103,843	275,746
1919	30,118	56,855	34,000	120,973	341,316
1920	36,455	60,325	38,015	134,795	407,064
1921	40,215	61,184	40,235	141,634	465,378
1922	42,200	61,367	40,642	144,209	513,821
1923	42,428	67,337	44,841	154,606	586,850
1924	44,322	70,754	51,148	166,224	652,121
1925	51,241	79,078	54,357	184,676	728,005
1926	57,857	97,267	65,590	220,714	836,794
1927	63,905	106,599	75,830	244,334	945,672
1928	71,163	121,615	89,249	282,027	1,076,819
1929	77,840	130,229	99,650	307,719	1,195,594
1930	79,308	129,861	102,652	311,821	1,239,889
1931	75,564	108,563	95,686	279,813	1,206,836
1932	71,570	91,275	86,878	249,723	1,114,503
1933	68,740	84,734	86,110	239,584	1,082,957

TABLE 4.--Number of Motor Vehicles Registered, Prairie Provinces and Canada, 1911-33 - Cont'd.
Number of Persons per Motor Vehicle

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
1911	189.4	377.6	229.5	247.3	334.9
1915	59.1	61.4	82.3	65.4	88.7
1916	43.4	40.8	52.1	44.5	64.8
1917	31.9	20.4	24.6	24.5	40.7
1918	23.5	13.4	17.8	17.0	29.5
1919	19.2	12.3	15.9	15.0	24.3
1920	16.3	12.2	14.9	14.0	21.0
1921	15.2	12.4	14.6	13.8	18.9
1922	14.6	12.5	14.6	13.7	17.4
1923	14.6	11.6	13.2	12.9	15.4
1924	14.1	11.2	11.7	12.1	14.0
1925	12.3	10.2	11.1	11.0	12.8
1926	11.0	8.4	9.3	9.4	11.3
1927	10.2	7.9	8.3	8.7	10.2
1928	9.3	7.1	7.4	7.7	9.1
1929	8.7	6.9	6.9	7.3	8.4
1930	8.7	7.0	6.9	7.4	8.2
1931	9.3	8.5	7.6	8.4	8.6
1932	9.9	10.2	8.5	9.5	9.4
1933	10.5	11.2	8.8	10.1	9.9
<u>Number of Passenger Cars Registered</u>					
1921	37,415	59,136	38,165	134,716	318,434
1922	38,913	60,352	38,214	137,479	462,275
1923	39,192	63,017	39,742	141,951	515,178
1924	40,843	64,666	47,871	153,380	573,975
1925	46,736	71,205	50,496	168,437	639,695
1926	52,201	86,105	59,767	198,073	728,067
1927	57,718	92,640	67,665	218,023	821,367
1928	63,384	102,839	78,302	244,525	921,395
1929	68,441	108,630	85,087	262,158	1,013,663
1930	68,550	108,161	85,067	261,778	1,047,494
1931	64,940	91,846	79,225	236,011	1,024,395
1932	61,420	75,685	72,079	209,184	945,564
1933	57,930	69,040	71,076	198,046	911,627
<u>Number of Persons per Passenger Car</u>					
1921	16.3	12.8	15.4	14.5	27.6
1922	15.8	12.7	15.5	14.4	19.3
1923	15.8	12.3	15.0	14.0	17.5
1924	15.3	12.2	12.5	13.1	15.9
1925	13.5	11.3	11.9	12.1	14.5
1926	12.2	9.5	10.2	10.4	13.0
1927	11.3	9.0	9.4	9.7	11.7
1928	10.5	8.4	8.4	8.9	10.7
1929	9.9	8.1	8.0	8.6	9.9
1930	10.0	8.3	8.3	8.8	9.7
1931	10.8	10.0	9.2	10.0	10.1
1932	11.5	12.3	10.3	11.4	11.1
1933	12.5	13.8	10.7	12.3	11.7

Use of Telephones:- Table 5 shows the number of telephones in use and the number of persons per telephone in the Prairie Provinces and Canada during the past decade. Telephones are particularly necessary for the business and professional classes, manufacturers, bankers, brokers and generally for people who depend on speedy communication. They are, therefore, likely to be found in greater numbers in cities. The greater use of telephones in some provinces is, therefore, not so much a sign of exceptional prosperity as a result of urbanization.

TABLE 5.--Telephones in Use - Prairie Provinces and Canada, 1921-33.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
1921	68,463	96,239	64,383	229,085	902,090
1925	69,000	100,096	70,073	239,169	1,142,876
1926	71,272	102,894	70,996	245,162	1,201,008
1927	74,032	107,782	73,407	255,221	1,259,987
1928	77,226	112,237	77,572	267,035	1,334,534
1929	79,279	100,697	80,273	260,249	1,382,822
1930	78,257	94,196	78,425	250,878	1,402,861
1931	73,399	82,875	70,427	226,701	1,364,200
1932	67,411	77,162	62,635	207,208	1,261,215
1933	61,874	74,258	57,429	193,561	1,192,330
<u>Persons per Telephone</u>					
1921	8.9	7.9	9.1	8.5	9.7
1925	9.2	8.0	8.6	8.5	8.1
1926	9.0	8.0	8.6	8.4	7.9
1927	8.8	7.8	8.6	8.3	7.6
1928	8.6	7.7	8.5	8.2	7.4
1929	8.5	8.8	8.5	8.6	7.3
1930	8.8	9.6	9.0	9.2	7.3
1931	9.5	11.1	10.4	10.4	7.6
1932	10.5	12.1	11.8	11.5	8.3
1933	11.7	12.8	13.2	12.6	9.0
<u>Telephones on Farms</u>					
1921	17,889	53,000	17,655	88,544	231,725
1926	14,605	50,572	21,316	86,493	-
1931	13,111	46,746	16,622	76,479	233,965

The number of farms in the Prairie Provinces increased from 255,657 in 1921 to 288,079 in 1931. The above figures would, therefore, indicate a decline in prosperity for the Prairie farmer since 1921, when the effects of the post-war slump were first being felt. The tendency towards consolidation of farm units would, of course, account for some decline in the number of telephones without indicating a corresponding decline in prosperity.

Sales of Life Insurance:- Monthly figures published by the Life Insurance Sales Research Bureau of Hartford, Connecticut, give the sales of new paid-for ordinary life insurance (excluding group policies) in each province as reported by companies doing from 80 to 90 p.c. of all business in Canada. The yearly figures have been taken (to eliminate the seasonal fluctuation) and adjusted to allow for business transacted by the smaller companies which do not report to the Hartford Bureau. The totals thus obtained are still incomplete, since they fail to allow for business done by friendly societies and fraternal organizations, but they have some value for comparative purposes. A somewhat better index for the purpose in view would be provided by the amount of life insurance in force at any given time but this is not available by provinces.

The sales of life insurance (total and per capita) in the nine provinces of Canada for the years 1921-33, estimated as above, are shown in table 6. Some allowance must be made for the distortion of the figures due to temporary business conditions such as good or poor crops. A weakness of this index, too, lies in the fact that life insurance sales depend largely on the constitution of the population. The best "prospects" for life insurance are probably young married men. Urban communities are, on the whole, better fields for insurance than rural ones. Even when allowance is

made for such factors, it is evident that, on the whole, the growth of life insurance in the Prairie Provinces has not kept pace with that in the other provinces of Canada. In 1921 the per capita insurance held in the Prairie Provinces amounted to \$59.29 while that for all Canada amounted to \$50.55. Since 1926 the per capita figure for the Prairie Provinces has been below that for Canada. In 1933 the former was \$24.31 and the latter \$40.54.

TABLE 6.—Sales of Ordinary Life Insurance, Prairie Provinces and Canada, 1921-33.
"000" omitted

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	\$	\$	\$	\$	\$
1921	40,422	38,782	36,716	115,920	441,284
1922	33,944	34,970	32,098	101,012	406,416
1923	34,535	37,753	28,498	100,786	435,996
1924	33,833	35,170	30,981	99,984	466,256
1925	39,885	35,890	35,852	111,627	505,590
1926	39,892	43,849	38,117	121,858	561,872
1927	40,782	41,209	41,694	123,685	599,244
1928	47,617	50,694	52,375	150,686	691,548
1929	48,344	49,022	46,164	143,530	731,389
1930	43,165	36,319	38,815	118,299	675,569
1931	35,669	26,604	28,273	90,546	582,906
1932	26,918	20,050	22,080	69,048	482,074
1933	24,556	16,312	18,209	59,077	432,997
<u>Per Capita</u>					
1921	66.27	51.23	62.44	59.29	50.21
1922	55.10	45.47	54.22	51.09	45.57
1923	55.79	48.53	48.06	50.65	48.39
1924	54.13	44.46	51.89	49.67	51.00
1925	63.11	44.53	59.55	54.72	54.40
1926	62.43	53.41	62.69	58.93	59.45
1927	62.65	49.00	65.87	58.20	62.18
1928	71.71	58.81	79.60	69.00	70.31
1929	71.41	55.52	67.49	63.96	72.92
1930	62.65	40.22	54.82	51.43	66.18
1931	50.96	28.85	38.62	38.46	56.18
1932	37.97	21.49	29.84	28.99	45.89
1933	34.01	17.15	24.05	24.31	40.54

Buildings— Building contracts awarded may be taken as an index of prosperity. They are more accurate and more comprehensive than building permits which may cover work that is eventually not carried out. The record of contracts awarded in each of the three Prairie Provinces and in Canada, as a whole, during the past decade is shown in table 7.

The depression which began to make itself felt in the latter part of 1929 and increased rapidly in intensity thereafter is reflected in the drastic declines shown by the figures for later years. While declines were general, it is evident that curtailment of building in the Prairie Provinces was greater than in other parts of Canada. Between 1929 and 1933, construction in Manitoba declined approximately 94 p.c.; in Saskatchewan 98 p.c.; in Alberta 90 p.c.; and in Canada 83 p.c. Building activity recovered somewhat in 1934 both in the Prairie Provinces and Canada. A classes in the Prairie Provinces registered increases. In Ontario, Quebec and British Columbia industrial building continued to decline.

Table 7 would seem to indicate relatively less prosperity in the Prairie Provinces than in the others, but it must be remembered that rural population is growing less rapidly than urban and that the Prairie Provinces are the most rural of the five economic areas of Canada. Part of the new building in Ontario and Quebec is to accommodate an increasing population, yet a stationary population might still be enjoying prosperity. Moreover, part of the new

building may represent speculative over-production. Again, office buildings in the cities of Ontario and Quebec are largely occupied by enterprises which carry on business in all parts of the country and draw their profits from a wide area; the erection of a new factory or office building in Toronto or Montreal may, therefore, reflect a successful selling campaign in the Prairie Provinces or in the Maritimes and may indicate prosperity in the east or west as well as in Ontario or Quebec. Wherever the initial purchasing power may have been, the industrial and commercial centres will share the result in the form of building contracts.

TABLE 7.--Value of Building Contracts Awarded, 1921-34.*

"000" omitted

		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		\$	\$	\$	\$	\$
Residential	- 1921	3,653	1,500	1,163	6,316	76,655
	1922	4,540	1,866	1,983	8,389	104,202
	1923	3,482	1,306	891	5,679	97,645
	1924	2,754	1,250	800	4,804	91,225
	1925	3,871	1,265	1,347	6,483	96,490
	1926	4,897	2,619	1,621	9,137	109,562
	1927	6,409	3,051	1,892	11,352	124,940
	1928	6,410	5,841	3,341	15,592	139,166
	1929	7,098	7,668	5,538	20,304	128,901
	1930	4,489	3,068	3,631	11,188	93,292
	1931	3,330	1,016	2,270	6,616	81,684
	1932	990	402	1,212	2,604	28,893
	1933	556	218	965	1,739	23,930
	1934	571	213	967	1,751	30,588
Business	- 1921	4,504	3,209	3,263	10,976	84,722
	1922	3,746	2,327	2,750	8,823	81,386
	1923	1,863	2,774	1,957	6,594	80,437
	1924	2,411	2,547	3,789	8,747	73,667
	1925	4,570	2,289	1,813	8,672	73,067
	1926	4,267	7,671	5,789	17,727	112,409
	1927	8,713	5,069	3,987	17,769	163,429
	1928	11,257	10,016	9,610	30,883	170,227
	1929	8,921	13,037	13,453	35,411	190,162
	1930	8,424	10,770	10,715	29,909	151,104
	1931	3,152	2,264	2,095	7,511	81,174
	1932	2,078	854	1,645	4,577	39,399
	1933	736	313	768	1,817	26,277
	1934	1,501	893	1,094	3,488	37,480
Industrial	- 1921	5,977	134	197	6,308	16,504
	1922	222	26	2,992	3,240	25,756
	1923	3,116	388	194	3,698	27,022
	1924	285	201	365	851	21,765
	1925	1,615	30	277	1,922	40,007
	1926	7,114	639	99	7,852	79,690
	1927	7,683	1,110	356	9,149	39,989
	1928	1,031	3,172	3,242	7,445	63,301
	1929	1,444	8,198	1,024	10,666	62,969
	1930	726	1,080	440	2,246	31,520
	1931	1,377	549	328	2,254	14,816
	1932	233	109	632	974	7,820
	1933	44	126	222	392	9,102
	1934	430	98	205	733	8,038

*From MacLeans Building Review.

TABLE 7.--Value of Building Contracts Awarded, 1921-34^x - Cont'd.

		"000" omitted				
		Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
		\$	\$	\$	\$	\$
Engineering -	1921	1,577	1,791	2,619	5,987	62,253
	1922	859	816	1,179	2,854	120,501
	1923	1,523	1,326	4,025	6,874	109,150
	1924	1,043	1,860	1,647	4,550	89,605
	1925	3,038	1,339	432	4,809	88,409
	1926	2,908	3,323	2,550	8,781	71,287
	1927	7,136	2,108	1,272	10,516	90,594
	1928	5,298	3,098	1,717	10,113	99,339
	1929	20,694	5,282	9,145	35,121	194,620
	1930	8,372	12,443	10,296	31,111	181,084
	1931	5,939	5,371	9,642	20,952	137,807
	1932	1,202	1,341	2,460	5,003	56,760
	1933	802	118	871	1,791	37,982
	1934	1,403	360	1,224	2,987	49,705
Total -	1921	15,711	6,634	7,242	29,587	240,133
	1922	9,366	5,034	8,904	23,304	331,844
	1923	9,984	5,793	7,066	22,843	314,254
	1924	6,493	5,858	6,600	18,951	276,261
	1925	13,093	4,923	3,868	21,884	297,973
	1926	19,187	14,252	10,058	43,497	372,948
	1927	29,940	11,338	7,507	48,785	418,952
	1928	23,995	22,127	17,910	64,032	472,033
	1929	38,157	34,184	29,160	101,501	576,652
	1930	22,011	27,361	25,082	74,454	457,000
	1931	13,798	9,200	14,335	37,333	315,482
	1932	4,504	2,705	5,948	13,157	132,872
	1933	2,138	775	2,826	5,739	97,290
	1934	3,905	1,563	3,489	8,957	125,812
Total Contracts						
per Capita -	1921	25.76	8.76	12.32	15.13	27.33
	1922	15.20	6.55	15.04	11.79	37.21
	1923	16.13	7.45	11.92	11.48	34.88
	1924	10.39	7.41	11.06	9.41	30.22
	1925	20.72	6.11	6.43	10.73	32.06
	1926	30.03	17.36	16.71	21.03	39.47
	1927	45.99	13.48	11.86	22.95	43.48
	1928	36.14	25.67	27.22	29.32	48.00
	1929	56.36	38.71	42.63	45.23	57.51
	1930	31.95	30.30	35.43	32.37	44.78
	1931	19.71	9.98	19.58	15.86	30.41
	1932	6.35	2.90	8.04	5.52	12.65
	1933	2.96	.81	3.73	2.36	9.11
	1934	5.34	1.62	4.53	3.63	11.61

^x From MacLeans' Building Review.

Bank Debits;— Bank debits furnish an index of business activity. Debits to individual accounts in the five economic areas of Canada for the years 1924-34 are shown in table 8.

For the period under review debits were highest in the Prairie Provinces in 1928 reflecting the large crop of that year. The peak was reached in the other areas in 1929. Subsequent declines reflect the lessened business activity and also lower prices. In comparing the per capita debits in the different provinces, it should be remembered that the predominantly rural character of the Prairie Provinces tends to lessen bank debits as compared with provinces where urbanization and industrialization are greater.

TABLE 8.—Bank Debits to Individual Accounts in the Clearing House Centres of Canada by Economic Areas, 1924-34.
"000,000" omitted

	Canada	Maritime Provinces*	Quebec	Ontario	Prairie Provinces	British Columbia
	\$	\$	\$	\$	\$	\$
1924	27,157	585	8,133	11,209	5,505	1,725
1925	28,126	572	8,475	11,236	6,000	1,842
1926	30,358	605	9,909	11,998	5,886	1,960
1927	36,094	628	12,744	14,642	6,127	2,053
1928	43,477	745	14,913	17,312	8,005	2,499
1929	46,670	798	16,488	18,543	7,923	2,923
1930	37,491	708	13,137	15,044	6,279	2,322
1931	31,586	653	10,550	13,377	5,201	1,806
1932	25,844	519	7,766	11,259	4,797	1,503
1933	29,981	481	8,567	13,027	6,414	1,492
1934	32,867	534	9,450	14,920	6,337	1,626
			<u>Per Capita</u>			
1924	2,971	589	3,260	3,664	2,735	3,021
1925	3,027	575	3,325	3,612	2,941	3,133
1926	3,212	606	3,807	3,792	2,846	3,234
1927	3,746	628	4,796	4,549	2,883	3,295
1928	4,422	742	5,493	5,281	3,665	3,899
1929	4,654	792	5,948	5,562	3,531	4,436
1930	3,673	702	4,650	4,443	2,730	3,435
1931	3,045	647	3,671	3,898	2,209	2,602
1932	2,460	508	2,669	3,240	2,014	2,135
1933	2,807	467	2,885	3,697	2,640	2,096
1934	3,033	513	3,127	4,184	2,569	2,243

*The extremely low level of debits in the Maritimes is explained by the fact that the only debits recorded are those at three clearing house centres. Total debits in the Maritimes are much greater than those at clearing house centres. Tests made to determine the proportions showed that debits at outside points in the Maritimes aggregated 90.6 p.c. of the debits at the three clearing house centres, while in the other areas the range was from 6.1 to 18.6 p.c.

Gasolene Consumption— Gasolene consumption by motor vehicles is often used as an index of prosperity. The accompanying table 9 shows such data by provinces, for the years 1929-33. Figures for earlier years are not available.

TABLE 9.—Gasolene Consumption by Motor Vehicles, 1929-33.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	Gallons	Gallons	Gallons	Gallons	Gallons
1929	24,626,656	47,726,980	45,707,605	118,061,241	482,715,157
1930	24,512,667	31,248,449	36,721,728	92,482,844	461,037,507
1931	22,142,728	26,479,689	24,746,025	73,368,442	463,298,366
1932	21,517,430	21,998,369	30,220,478	73,736,277	440,835,414
1933	22,253,000	21,652,000	27,482,000	71,387,000	427,658,000

TABLE 9.--Gasolene Consumption by Motor Vehicles, 1929-33 - Cont'd.
Average Number of Gallons per Registered Motor Vehicle.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	Canada
	<u>Gallons</u>	<u>Gallons</u>	<u>Gallons</u>	<u>Gallons</u>	<u>Gallons</u>
1929	316	366	459	384	404
1930	309	241	358	297	372
1931	293	244	259	262	384
1932	301	241	348	295	395
1933	324	256	319	298	395

It will be noted that there was a greater proportionate decline in gasolene consumption in the Prairie Provinces than in the rest of Canada. Between 1929 and 1931 gasolene consumption per registered motor vehicle in the Prairie Provinces declined 32 p.c., and in Canada 5 p.c. In 1932 and 1933 some of the loss was regained, gasolene consumption per registered motor vehicles in the latter year showing 22 p.c. and 2 p.c. declines from 1929 for the Prairie Provinces and Canada respectively. Figures of gasolene consumption are affected by touring motorists from other provinces and the United States. After making allowance for such factors, however, it is evident that inhabitants of the Prairie Provinces found it necessary to curtail the operation of their motor vehicles during the past few years to a much greater degree than did those living in other parts of Canada.

Radios:- In the 1931 census information was collected as to the ownership of radio receiving sets. The number of radios per 1,000 of the rural population in Manitoba was, in 1931, 48.67 and of the urban population 83.94. Similar figures for Saskatchewan are 48.57 and 84.87 and for Alberta 47.49 and 82.03. In Canada, as a whole, there were 45.78 radios per 1,000 of the rural population and 98.87 per 1,000 of the urban population.

Others:- The consumption of various luxuries such as tobacco, sugar, tea, coffee, etc., is sometimes used as an index of prosperity. None of these tests can be applied in the present instance, as provincial statistics of consumption are not available. Various plans have been proposed to measure consumption such as the use of sales tax collections, luxury taxes, taxes on theatre tickets, etc., but for obvious reasons they are not applicable under the methods of collection followed in Canada.

CHAPTER VI.--PRICES AND THE COST OF LIVING.

When the general level of prices has been fairly constant over a period of time a rough equilibrium exists between the prices of different commodities, services and incomes. When the level changes, and especially when change is rapid, this equilibrium is upset, for all prices do not change at equal rates. Prices of manufactured goods lag behind those of foods and raw materials, and retail prices behind wholesale, resulting in greater loss of purchasing power and consequently more hardship for certain classes than others. Thus the drastic fall in the prices of primary products in recent years has borne heavily upon agricultural producers. The prairie farmer, dependent for his purchasing power upon a crop, the average price of which in 1932 was little more than two-fifths that of 1929, found that the prices of the commodities he had to buy had not fallen in anything like the same proportion.

The position of the average Canadian farmer as between the prices obtained for his produce and those paid for the commodities he buys may be roughly gauged from table 1, which, starting with immediate pre-war prices as a base of 100, compares the subsequent fluctuations in the prices of Canadian farm products and of manufactured goods. The years during and immediately following the war were prosperous ones for the farmer. The index of farm products prices rose from 100 in 1913 to 258.2 in 1920 and during these years was at a considerably higher level than manufactured goods, which advanced from 100.0 to 242.0. The farmer lost his relative advantage during 1921, the index for his products dropping rapidly to 164.2, while that for manufactured goods stood at 180.0. The disparity between the two groups increased to the farmer's disadvantage during the next two years but lessened slightly in 1924. In 1925 the two groups reached practical equilibrium. During the next four years the advantage was again with the farmer. In 1930 and 1931 farm prices dropped rapidly as compared with those of manufactured goods. In 1932 the disparity between the two groups was intensified, although there was a considerable slackening in the rate of decline. For the following year the indexes of both groups moved upward, farm products rising to 79.8 and manufactured goods to 108.3. During the first three months of 1934, manufactured goods averaged around 25 points higher than farm products, but latterly this difference was reduced to approximately 17 points.

TABLE 1.--Weighted Index Numbers of Wholesale Prices of Canadian Farm Products and Fully or Chiefly Manufactured Goods, 1913-34.
(1913 = 100)

	Farm Products	Manufactured Goods		Farm Products	Manufactured Goods
1913	100.0	100.0	1924	139.1	157.3
1914	110.8	101.0	1925	160.5	160.2
1915	124.1	110.9	1926	159.8	154.3
1916	143.4	130.4	1927	163.2	148.9
1917	207.7	175.5	1928	158.4	146.6
1918	212.3	196.9	1929	158.8	143.5
1919	232.5	204.4	1930	127.7	134.7
1920	258.2	242.0	1931	86.1	115.4
1921	164.2	180.0	1932	75.1	107.7
1922	138.5	155.0	1933	79.8	108.3
1923	127.6	159.1			
1934 *					
January	86.1	112.6	July	95.1	112.9
February	90.0	115.0	August	98.1	113.6
March	88.1	115.7	September	97.1	113.9
April	86.4	113.9	October	95.6	112.6
May	89.1	112.2	November	96.0	112.0
June	93.5	112.8	December	96.6	112.2

* 1934 subject to revision..

The index numbers shown in table 1 are based on prices at various centres throughout Canada. Similar indexes for the Prairie Provinces alone are not available. Some additional information as to the position of the average prairie wheat farmer is afforded, however, by a comparison of wheat prices and the general price level in recent years as shown in table 2.

TABLE 2.—Index Numbers of Wholesale Prices in Canada and Great Britain and of No. 1 Northern Wheat (Winnipeg Cash Price, Basis in Store Port Arthur and Fort William).

	General Index Canada	Board of Trade ^x United Kingdom	Wheat No. 1 Manitoba Northern Fort William and Port Arthur Basis 1926=100
	1926=100	1926=100	
1927	97.7	95.6	99.0
1928	96.4	94.7	90.2
1929	95.6	92.2	89.8
1930	86.6	80.7	63.0
1931	72.1	70.3	39.3
1932	66.7	68.6	37.2
1933	67.1	68.1	40.8
<u>1934</u>			
January	70.6	70.6	43.5
February	72.1	71.1	43.9
March	72.0	70.1	44.4
April	71.1	69.4	43.8
May	71.1	69.1	47.2
June	72.1	70.0	51.6
July	72.0	69.8	54.8
August	72.3	71.2	57.5
September	72.0	71.0	55.0
October	71.4	70.3	52.3
November	71.2	70.3	53.2
December	71.2	-	53.0

^xTransposed from the base 1913=100.

The general trend of the cost of living in the Prairie Provinces since 1926 is shown in the accompanying table of index numbers (table 3) which includes foods, fuel, lighting and rentals. A typical family budget in terms of average prices for the whole Dominion in the year 1913 was first worked out and figures for subsequent years expressed as percentages of that total. It will be noted that trends have not differed materially in the Prairie Provinces from elsewhere. A comparison of tables 1 and 3 illustrates how adjustments in retail prices paid by the consumer have tended to lag behind movements in wholesale prices. The Bureau's index of wholesale prices of Canadian farm products in 1933 was approximately 20 points below and a similar index of manufactured goods was about 8 points above 1913 levels. As stated above, index numbers of wholesale prices of farm products and of manufactured goods for the Prairie Provinces alone are not available. Retail prices of staple foods in 1933 for Canada, as a whole, were more than 4 points below those for 1913. The fuel and light group was over 50 points above, rent more than 21 points above, and the total cost of living almost 12 points above 1913 levels. For the Prairie Provinces retail food prices were lower than in Canada as a whole, fuel and lighting prices were higher in Manitoba but lower in Saskatchewan and Alberta, while rent was higher in each of the Prairie Provinces than in Canada as a whole. For further details see table 3.

TABLE 3.--Index Numbers of a Family Budget of Staple Foods, Fuel and Lighting and Rent, 1916-33.
Dominion Average 1913=100

	Manitoba	Saskatchewan	Alberta	Canada	Manitoba	Saskatchewan	Alberta	Canada
	<u>Staple Foods</u>				<u>Fuel and Lighting</u>			
1916	118.3	120.8	119.8	119.8	123.8	129.0	91.0	100.7
1917	146.8	151.4	157.4	155.6	141.7	142.6	92.0	123.8
1918	171.0	177.0	180.0	177.3	158.4	159.4	101.3	149.2
1919	188.3	192.7	191.3	189.2	174.1	178.8	119.5	160.2
1920	220.2	215.6	218.0	217.9	206.3	210.3	161.6	191.6
1921	162.6	164.7	163.6	164.9	221.4	216.5	140.4	198.4
1922	137.3	138.6	137.4	141.7	194.5	205.8	129.7	183.6
1923	136.4	141.1	138.2	143.5	203.9	201.7	134.8	185.7
1924	133.1	137.7	139.4	140.5	195.3	195.2	122.5	177.8
1925	141.7	148.2	149.9	147.3	188.5	186.4	128.3	174.1
1926	142.2	148.6	147.5	152.8	184.8	181.2	126.2	176.0
1927	141.6	150.7	148.4	149.9	183.2	182.7	122.0	172.8
1928	145.6	152.3	151.1	150.4	184.8	183.8	108.4	171.5
1929	151.2	158.3	158.9	154.7	189.5	181.2	100.5	171.2
1930	144.5	149.1	150.9	149.4	190.1	174.9	100.5	170.2
1931	108.8	110.4	111.8	115.7	181.7	160.7	97.4	166.5
1932	93.0	93.4	93.0	96.8	159.2	112.6	94.2	158.6
1933	92.1	92.4	92.1	95.8	153.9	102.6	90.6	150.3
	<u>Rent</u>				<u>Grand Total</u>			
1916	100.9	106.5	106.8	84.9	113.0	117.1	111.5	105.4
1917	109.7	110.8	111.3	90.9	133.2	136.3	132.8	129.4
1918	117.6	128.2	120.6	99.4	151.0	157.8	149.0	147.2
1919	121.1	157.8	134.6	109.5	163.3	178.9	162.1	158.1
1920	159.6	178.1	154.7	130.5	197.4	202.1	188.6	184.7
1921	181.2	180.8	158.5	142.5	176.8	177.2	158.7	161.9
1922	181.2	182.5	161.2	146.0	160.1	162.8	144.5	148.9
1923	181.2	184.5	157.7	146.6	160.7	163.9	144.1	150.2
1924	184.2	187.6	150.8	146.3	158.6	162.1	140.6	147.6
1925	184.2	184.2	148.0	144.9	162.2	165.3	146.0	150.2
1926	184.2	184.2	151.8	144.4	161.9	164.8	145.8	153.1
1927	184.2	184.2	152.4	144.4	161.5	166.2	145.9	151.2
1928	184.2	184.2	151.8	145.6	163.8	167.2	145.3	151.7
1929	184.2	184.2	157.9	146.9	167.4	170.0	150.4	154.1
1930	184.2	185.7	161.7	148.2	163.9	164.7	147.4	151.8
1931	176.6	176.8	160.4	146.3	141.5	139.5	126.1	133.1
1932	153.5	156.0	143.6	135.6	122.3	117.0	110.1	118.1
1933	131.8	133.1	125.5	121.3	113.8	107.4	103.0	111.7

The Bureau has in process of preparation a series of index numbers indicating the behaviour of prices for commodities farmers purchase. Preliminary calculations reveal that prices for such commodities fell approximately 22 p.c. between 1926 and 1933, while wholesale prices of Canadian farm products declined 49 p.c. Due to price movements alone, therefore, the purchasing power of the agricultural community has been curtailed by at least 35 p.c. Price movements in 1934 were favourable to a moderate improvement in purchasing power.

CHAPTER VII.--THE FINANCIAL RELATIONS OF THE DOMINION AND THE PRAIRIE PROVINCES

PART I.--HISTORICAL

Introduction:- When the original provinces entered Confederation they were compensated for the loss of customs and excise duties (hitherto their chief source of revenue) by the grant of Dominion subsidies which consisted, originally, of two parts:- (1) a fixed allowance for the cost of local legislatures; (2) an additional sum of 80 cents per head, based, in the case of Ontario and Quebec, upon the 1861 population. In the case of Nova Scotia and New Brunswick, this allowance was to increase until the population of each province reached 400,000 but thereafter was to remain stationary. A special concession of \$63,000 per annum for 10 years to New Brunswick as reconciliation for "exceptional circumstances" established a precedent of which frequent use was made in later years. It was not contemplated that the cost of provincial government would grow; should, however, expenditures exceed the natural increase of the territorial revenues, a resort to direct taxation as per section 92 (2) of the B.N.A. Act would be necessary, an alternative which was considered to carry its own safeguard against local extravagance.

In regard to the provincial debts, it was agreed that the Dominion Government should assume these, as existing at the date of Confederation with the exception of such parts as had been contracted for specific local purposes. A fixed per capita basis of \$25 for debt allowances was adopted. The public lands and natural resources, the control and administration of which had always been a source of considerable revenue for the provincial treasuries, were retained by the provinces.

In drawing up the financial arrangements the Fathers of Confederation strove to attain the greatest possible degree of fairness and the adoption of the subsidy principle represented one of the compromises deemed necessary. It was generally assumed that the arrangements would be final and a clause to that effect was inserted in the Act. There were some, however, who foresaw the inevitability of further demands. Mr. Dunkin in opposing the subsidy principle remarked:-

"With one accord the provincial governments will in a quiet way want money and the provincial legislatures and people will want it more: grants for roads, for bridges, for schools, for charities, for contingencies of the legislature, for all manner and ends they will be wanting money and where is it to come from? Whether the constitution of the provincial executive savors of responsible government or not, to be sure it will not be anxious to place itself more under the control of the legislature or to make itself more odious than it can help, and the easiest way for it to get money will be from the general government."

The frequency of subsidy revisions in later years confirmed the accuracy of this prediction. On the other hand, it is but fair to the provinces to state that the demands on provincial exchequers, especially those due to the expansion of the people's ideas as to the functions of Government (an expansion which has been largely in the sphere of education and social and humane legislation reserved by the British North America Act to the provinces), could hardly have been foreseen by the Fathers of Confederation. Space does not permit a detailed study of Dominion - provincial relations from Confederation to the present time. The salient features, as affecting the Prairie Provinces will, however, be briefly reviewed.

The Province of Manitoba:- In July, 1870, the Hudson's Bay Company, in consideration of a payment of 300,000 pounds, and the title to one-twentieth of the lands in the ceded territory, formally surrendered to the Dominion its chartered rights in Rupert's Land and the North-West Territory. Out of the south-eastern part of this territory was created in the same year the province of Manitoba.

Financial arrangements were designed to follow insofar as was possible, the same principles as in the case of the older provinces. The new province received a grant of \$30,000 annually from the Dominion exchequer for the support of its government plus 80 cents per head on an estimated population of 17,000; this sum was to be increased until the population reached 400,000 and thereafter to remain fixed.

The new province had no debt, but was granted an allowance of \$472,090 on an assumed indebtedness reckoned by applying the then existing per capita debt allowance of the Maritimes (\$27.77) to Manitoba's estimated population of 17,000; upon this it was to receive interest half yearly in advance. As in the case of the other provinces, the declaration that these grants were to be in full and final settlement of all future demands on the Dominion treasury was included in the Manitoba Act.

In contrast with the policy adopted at Confederation, all the ungranted public lands in the new province were to be vested in the Crown and administered by the Government of Canada for the purposes of the Dominion. As these lands had been acquired by purchase, the situation was, it was claimed, entirely different from that existing when the older provinces, at the time in possession of their natural resources, had voluntarily entered Confederation. Moreover, to compete with the trans-continental railways and free homesteads of the United States, a great national policy of surveys, free land and railway construction to ensure rapid immigration was thought essential. The land grant system, though long since discarded in both the United States and Canada, was at that time the only resource available to ensure the building of a railway to the Pacific.

The Movement for Better Terms - Readjustments to 1905:- It was not long before the pressure of financial embarrassment led Manitoba to agitate for better financial terms. While expenditures were increasing rapidly, the circumstances of the new settlers rendered resort to direct taxation inexpedient. In 1873 when the Dominion Government assumed the excess of the actual debt of Ontario and Quebec over their original allowances, Manitoba and the other provinces were granted corresponding proportionate increases in their respective debt allowances. In 1875 Manitoba was granted a temporary annual increase to raise the revenue derivable from the Dominion to \$90,000 (the minimum it considered necessary for its needs) this to continue until 1881 when it would be entitled to an increased subsidy because of the growth in population. A considerable saving was effected, too, by the abolition of the Upper House of the Legislature. In 1879, the above grant was increased to \$105,000.

In 1881, the boundary of the new province was extended westward from the 99th meridian of west longitude to its present position. In that year, Manitoba asked that, in view of the expiration of the supplementary grants mentioned above, provision should be made by the Dominion Government so that the province would have an adequate amount of revenue. In addition to increased allowances it requested the transfer to it of the unalienated public lands in its territory other than those required for railway purposes and compensation for lands appropriated for the Canadian Pacific Railway.

A committee of the Privy Council appointed to investigate the above claim recommended that Manitoba's population for calculating the amount of the 80 cents per capita subsidy should be taken as 150,000 (the actual population in 1881 was only 64,814) also that the grant in aid of the government and legislature should be raised from \$30,000 to \$50,000 per year. The transfer of public lands to the province was not favoured, but, in view of Manitoba's peculiar position, it was recommended that \$45,000 per annum should be paid to the province by the Dominion. An Act of 1882 gave effect to these provisions.

By the Dominion Lands Act of 1872 certain lands in the province had been set aside as an endowment for the purposes of education. The interest on this fund, after the cost of administration had been deducted, was to be paid annually. To enable the province to provide public schools, advances were authorized equal to \$10,000 per annum for three years ending June 30, 1881. This amount plus 5 p.c. interest was to be charged against the first sale of school lands.

In 1884 the provinces once more joined in an appeal to the Dominion for larger grants, on the ground that the readjustment of 1873 should have been retroactive to Confederation, and claimed, not only arrears of capital, but interest as well. A readjustment was effected by which the interest on the excess, which between 1867 and 1873 had been deducted from the subsidies, was paid over by the Dominion. All the provinces received increases proportionate to those of Ontario and Quebec. Manitoba profited in this arrangement, however, only to the extent of \$5,500 annually. In the same year, the Dominion authorized a further advance to Manitoba of \$30,000 for educational purposes payable in two years, to be repaid with interest at 5 p.c. from the first sales of school lands.

In 1885, an Act provided that the Governor in Council could, at his discretion, make advances to any province for local improvements, provided the sums advanced were not greater in the aggregate than the amount by which the debt allowance of the province exceeded the actual provincial debt for which the Dominion was responsible. These advances had to be sanctioned by a previous vote of the provincial legislature. Several of the provinces, including Manitoba, availed themselves of this offer in succeeding years by drawing on the capital of their debt allowances.

The burden of increased expenditures due to rapid development continued to press heavily upon Manitoba. Renewed agitation for increased grants and for the control and management of its natural resources, led in 1885 to the transfer to the province of the ownership of its swamp lands and the setting aside of 150,000 acres as an endowment for the benefit of a provincial university. The annual grant in lieu of lands was raised from \$45,000 to \$100,000.

The per capita subsidy of 80 cents was henceforth to be adjusted until the population reached 400,000, as reckoned by the censuses and by estimates at equal intervals between each quinquennial and decennial census. In addition, Manitoba's debt allowance was now to be calculated on a population of 125,000 at the same per capita rate as when the Act came into force. An additional grant of \$150,000 for the construction of a "lunatic asylum" and other exceptional services was authorized. These provisions, which were considered extremely generous^x by the Dominion Government, were conditional upon the province accepting them as a final settlement. Manitoba accepted the settlement but objected to the finality on the ground that the alternative to increased help from the Dominion Government, i.e. direct taxation, would deter immigration to the province. No further concessions were made until 1898 when a further allowance was granted on account of the cost of public buildings and a Government House.

The question of the financial arrangements between the provinces and the Dominion continued to be a prominent public issue. At an interprovincial conference held at Quebec in 1887, it was contended that the payments made to the provinces by the Dominion were totally inadequate and that the former could not provide by direct taxation or otherwise for their increasing and necessary expenditures. Since 1868, it was pointed out, the revenue accruing to the Dominion from customs and excise duties had materially increased, while the increase of population had augmented provincial expenditures with no corresponding increase in provincial revenues. Increased subsidies based on increasing population were favoured. No immediate changes resulted from this nor from interprovincial conferences held in 1902 and 1906, when similar resolutions were adopted, but these proposals became the basis for the general readjustment of 1907.

Alberta and Saskatchewan:- On September 1, 1905, the provinces of Alberta and Saskatchewan were created. Subsidies were established for each province as follows:- \$50,000 for the support of its government and legislature plus 80 cents per head on an estimated population of 250,000 this to increase with the population until it should reach 800,000. In lieu of public debt a per capita allowance of \$32.43 (the sum to which the debt allowance of the other provinces had been raised in 1884) gave to each province a total of \$8,107,500 on which it was to receive half-yearly payment of interest at 5 p.c. per annum from the Dominion.

All the Crown lands and natural resources were retained by the Dominion to be administered for the general purposes of Canada. The reasons for this policy were substantially the same as those advanced in 1870 in the case of Manitoba, viz., the land had been purchased; large expenditures had been incurred by the Dominion to obtain and hold the territory in peaceable possession; it was feared that if the lands were transferred to provincial administration, the provinces, finding themselves in financial difficulties, might abolish the system of free homesteads which had provided so great an inducement to immigration. That there was a greater appreciation of provincial rights than in 1870, however, is evident from the definite assertion made in the course of the debates that it was not in contemplation to administer the lands indefinitely for the purposes of the Dominion. In compensation for being deprived of a valuable source of revenue there was granted an annual allowance of \$375,000 until the population reached 400,000 thereafter \$562,500 until it reached 800,000, thereafter \$750,000 until it reached 1,200,000 and thereafter \$1,125,000. There was also a special annual grant of \$93,750 to each province for five years to provide for the construction of necessary public works.

In the course of the debates on the Alberta and Saskatchewan Bills, the subsidy principle came in for much discussion. In introducing the Bills Sir Wilfrid Laurier said:

"It is a sound principle of finance and a still sounder principle of government that those who have the duty of expending the revenue of a country should also be saddled with the responsibility of levying and providing it. That principle has been departed from in our case I do not think it is sound; it is the duty of everybody in this House and in this country to take Confederation as we find it with its good points and its blemishes and carry it to the end on the principle upon which it was established. The day may come probably at no distant time when the whole subject of the provincial subsidies will have to be taken up in a more radical way than any in which we can deal with it to-day."

^xThe \$100,000 grant in lieu of lands, was equal to \$1.50 per head. Ontario's gross receipts from its public lands at this time averaged 40 cents per head from which the costs of survey, sale etc., had to be deducted. Manitoba had no expenses to deduct from its \$100,000 grant.

Readjustments 1907 and later:- In 1907, the whole question of subsidies was once more reopened. An Act of July 1, 1907, provided that each province was to receive a specific annual grant for its local purposes and the support of its government and legislature as follows:-

<u>Population</u>	<u>Grant</u>	<u>Population</u>	<u>Grant</u>
Under 150,000	\$ 100,000	400,000 - 800,000	\$ 190,000
150,000 - 200,000	150,000	800,000 - 1,500,000	220,000
200,000 - 400,000	180,000	Over 1,500,000	240,000

Further, the annual grant was henceforward to be paid at the rate of 80 cents per head until the population of a province exceeded 2,500,000 and at the rate of 60 cents per head on the excess. An additional allowance of \$100,000 annually for 10 years was granted to British Columbia. The provincial debt allowances were left unchanged and no change was made in the Dominion's policy in regard to the natural resources question in the western provinces.

When moving the address in the House of Commons in 1907 Sir Wilfrid Laurier recited the subsidy plan as adopted at Confederation, traced the various demands and readjustments since that time and elucidated the unsatisfactory condition of the existing arrangements.

"If the principle be admitted" he asserted "of a contribution being made from the Dominion treasury to the provinces, the provision made by the B.N.A. Act for contributions to the provinces has proved to be absolutely insufficient and inadequate. The experience of forty years has brought this fact again and again to the attention of parliament and the people of Canada not once, not twice, nor thrice, but periodically and systematically, parliament has been asked at almost regular intervals to vote, in favour of now one province and now another province, appropriations far in excess of anything that has been stipulated by the B.N.A. Act. All these have been made by Parliament without any guiding principle but simply as the expediency of the moment suggested, or rather as the financial difficulties of one province or the other were more or less urgent."

In 1912, the boundaries of Manitoba were extended, and terms granted similar to those accorded Saskatchewan and Alberta. The debt allowance was placed on the same basis as those of Alberta and Saskatchewan, i.e. \$32.43 per capita. This, on a population of 250,000, equalled \$8,107,500 from which \$475,816.15 previously advanced for provincial purposes was deducted, leaving \$7,631,683.85 on which Manitoba received from the Dominion interest at 5 p.c. per annum equivalent to a yearly grant of \$381,584.19. This grant was made retroactive to July 1, 1908. The unsold swamp lands were re-transferred to the Dominion and Manitoba placed on the same basis as Alberta and Saskatchewan in respect to public land allowances.^x

As above stated, Alberta and Saskatchewan had been granted an additional sum of \$93,750 annually for five years towards the expense of public buildings. By the agreement of 1912, Manitoba received a like sum, but from the \$468,750 representing the total grant, \$267,026 expended by the Dominion on the existing public buildings in the province was to be deducted.

At the Dominion-provincial conference held at Ottawa in October, 1913, the provinces contended that the existing financial arrangements were entirely inadequate in consequence of "the heavy and steadily increasing amounts required to maintain the efficiency of government services and to promote the material and moral progress of the people". A resolution was adopted requesting that an additional grant equal to 10 p.c. of the annual customs and excise duties be paid to the provinces. Out of this additional grant there was to be set aside an amount sufficient to pay each province a sum equal to 50 p.c. of the sum payable to it in support of its government and legislature under the existing arrangements, the balance to be payable to each province according to its population as ascertained from time to time by the census. This resolution was adopted with the understanding that it was not to prejudice the existing claims or demands, or to impair the right of any province to submit to the Dominion Government memoranda in writing concerning any claim it might have to larger sums than those mentioned in the resolution.

^x Of the 2,012,416 acres of swamp lands previously transferred to the province 848,274 acres had been sold for \$3,189,168 prior to 1912. Thenceforth, Manitoba was to receive \$562,500 annually in lieu of public lands but from this she had to allow the Dominion \$153,493, being 5 p.c. interest on (a) \$2,769,857, this being the value of the swamp lands sold by the province (for \$3,189,168) after deducting the cost of inspection formerly charged against the province (\$211,943) and the allowance for administration (\$207,360), and (b) \$300,000 representing the value of 150,000 acres with which the provincial university had been endowed.

The addition, in 1912 to Ontario and Quebec of extensive northern areas in which they were allowed the control of their natural resources emphasized the anomalous position of the western provinces and produced much irritation. In March, 1914, Sir R. L. Borden stated that his Government would agree to transfer the natural resources to the western provinces if they would relinquish the subsidies in lieu of public lands, a proposal which the provinces were unwilling to accept. The outbreak of the war soon relegated such issues to obscurity for several years.

Upon the conclusion of the war, provincial agitation revived. In November 1918, the premiers of the three Prairie Provinces made application to the Union Government for the transfer to their beneficial control of the unalienated natural resources within their borders. They were still unwilling, however, to forego their subsidies in lieu of public lands, regarding these as indemnities for lands already alienated, and the matter dropped.

In 1920 the Dominion Government again expressed its willingness to transfer the resources to the Prairie Provinces and to do everything in its power to arrive at a fair settlement. As the war had added enormously to the public debt of the Dominion as compared with the relatively small increase in provincial public debts the western provinces were asked whether they would abate all or part of their subsidy in lieu of lands in the event of a transfer of the resources. Otherwise it was contended, the other provinces would demand proportionate increases in their existing subsidies. Manitoba, however, absolutely refused to consider any abatement.

The subsidy question was the great stumbling block in the way of settling the natural resources controversy. Successive Dominion Governments, both Liberal and Conservative, consistently took the position that the resources could not be transferred and the subsidies continued while the western provinces were adamant in their unwillingness to forego the latter. On the other hand, retention of the subsidies by the Prairie Provinces was opposed by the other provinces unless they received additional proportionate allowances. This was opposed by the Prairie Provinces on the ground that it would be equivalent to granting the other provinces a share in the beneficial interest accruing from their private domain.

A further difficulty was that of compensation for lands already disposed of. The policies of the Dominion Government in regard to western immigration, railways, irrigation, mounted police and other subjects had involved large expenditures attributable in substantial but unascertainable proportions to the fact that control of the natural resources had been retained by the Dominion. Accounting was, therefore, extremely difficult. The position of the western provinces was, in effect, that they were entitled to their natural resources as from 1870 and therefore they demanded beneficial control of those which had not yet been alienated and compensation on a fiduciary basis for those already disposed of for the purposes of the Dominion. The Dominion Government had already recognized the principle that these provinces were entitled to such control but the question of compensation for the lands which had been alienated was not easily settled.

During 1922 the Dominion Government, under Mr. King, proposed a settlement by ignoring past transactions and making a fresh start. The surrender of the subsidy in lieu of lands would, he thought, remove the objections of the other provinces to the transfer of the resources. "We do not see" said Mr. King "how the Prairie Provinces could seriously expect to receive the lands and at the same time continue to receive the land subsidy". If a system of accounting by an independent tribunal was preferred, the Dominion authorities would not object and this course was favoured by the three provinces concerned. Their delegates met at Ottawa in April 1922, but the proposals made were found to be unacceptable. While no definite agreement as to terms was reached some progress was indicated by an agreement that the transfer should be made on a basis which would put the western provinces in a position of equality with the other provinces of the Dominion. It was agreed, too, that instead of all three provinces seeking to deal with the Dominion Government at one time it would be better for each province to negotiate separately.

It would be tedious to trace in detail the course of negotiations during the next few years. Between 1922 and the beginning of 1927 there were two conferences, five or six less formal interviews and almost continual correspondence in regard to Manitoba lands, yet in January 1927, Premier Bracken wrote to Mr. King:-

"After more than four years of negotiations upon the basis of the agreement of April 21, 1922 between the government of the Dominion and the province of Manitoba, we have very reluctantly reached the conclusion that the attempt to settle the natural resources question by mutual consent has broken down not only have all negotiations for a final settlement broken down but the proposal of Manitoba to adjust at once less controversial details like the school lands and the school lands fund has proved unacceptable to the Dominion."

He suggested that the natural resources question should be referred to arbitration, possibly before the judicial committee of the Privy Council.

At this time, the problems of the Maritime Provinces were also pressing for attention and the course followed in regard thereto exercised a very considerable influence upon the course of subsequent negotiations with the western provinces. Persistent and prolonged agitation over a lengthy period resulted in the appointment of the Duncan Commission in April 1926, to investigate alleged Maritime grievances. The Commission's report, presented September 23, 1926, concurred in the provincial claims for increased compensation. Pending the determination of the nature and extent of such revision by competent authorities, immediate lump sum minimum grants were recommended.

Meanwhile, an interprovincial conference was held in June 1926, at which a resolution was passed expressing sympathy with those provinces which, by reason of peculiar conditions had not progressed as anticipated and urging the Dominion Government to afford them relief. Manitoba and Prince Edward Island favoured a doubling of the per capita subsidy but this was strongly opposed, particularly by Ontario and Quebec.

The annual sums recommended by the Duncan Commission were granted the Maritimes with the understanding that they were not to prejudice the amounts to be finally arrived at as a solution. The Dominion Government deemed it inadvisable to attempt a readjustment of the financial arrangement with the Maritimes until the needs of all the provinces had been carefully considered. To ensure an early consideration of the question it was placed on the agenda of the Dominion-provincial Conference held in November 1927.

At the 1927 conference the financial relations between the Dominion and the provinces proved one of the most prominent and troublesome issues. Three of the provinces, Ontario, Quebec and Saskatchewan refrained from making specific financial demands, but sympathized with the claims of the other provinces. None regarded the existing arrangements as final. Much of the discussion centred around such topics as the inelasticity of provincial revenues and, in contrast, the great increase in provincial responsibility for onerous services; the necessity for a clearer delimitation of the powers of taxation as between the Dominion and the provinces and the advisability of assigning certain taxes, whether direct or indirect, specifically to the provinces. The Minister of Finance, Mr. Robb, referred to the enormous war debt and tremendous burdens imposed by the railway system of the Dominion, as well as to the necessity of maintaining Canada's credit both at home and abroad, and pointed out that if all the provincial requests were granted the cost to the Dominion would be \$100 millions a year. (It is interesting to note that in 1927 scarcely any of the provinces believed in the desirability of Dominion subventions for unemployment relief).

With regard to the natural resources question, the western provinces again insisted on the retention of the subsidy in lieu of lands even though they received control of the latter. The Maritimes claimed that they were entitled to a brotherly consideration by the western provinces for having shared the burden so that these lands could be made valuable by railway and other developments. This view was denied by the western provinces which claimed that the Dominion in place of having incurred a deficit had actually reaped a profit from the administration of public lands in the west.

In the same year, 1927, a motion was made in the House of Commons that the natural resources should be transferred to the western provinces and that "this transfer should not interfere with, restrict or modify the right of the provinces to the complete control of their educational or other local affairs." As the part of the motion dealing with education was then before the courts nothing further was done at the time.

In July 1928 a conference with Manitoba officials was held at Ottawa and an agreement was reached as to the method and basis of settlement. Manitoba was to be placed in a position of equality with the other provinces of the Dominion with respect to the administration and control of its natural resources as from its entrance into Confederation in 1870. The Government of Canada with the concurrence of the Government of Manitoba was to appoint a commission of three persons to inquire and report as to what financial readjustments should be made to effect this end. Upon agreement on the financial terms following consideration of the report of the commission, the respective Governments were to introduce the necessary legislation to give effect to the financial terms as agreed upon and to effect the transfer to the province of the unalienated natural resources within its boundaries, subject to any trust existing in respect thereof and without prejudice to any interest other than that of the Crown in the same. Pending this transfer, the policy of the Government of Canada in the administration of the natural resources of Manitoba was to be in accord with the wishes of the Government of the province. The Hon. W.F.A. Turgeon, Saskatchewan, Hon. T.A. Crerar, Winnipeg, Manitoba, and Charles M. Bowman, Kitchener, Ontario, were chosen for the above mentioned Commission.

Alberta had agreed in 1926 to relinquish the subsidy in lieu of lands on condition of being given the equivalent of three years subsidy as a cash payment. There was some question, however, as to the constitutional validity of Section 17 of the Alberta Act relating to education, and it was decided not to proceed with the proposed legislation as drafted until the question was authoritatively settled. At the Dominion-provincial conference in 1927 it became apparent that the other provinces, influenced by Dominion treatment of the Maritimes, were prepared to take a more generous attitude in dealing with the western provinces and Alberta asked that the whole discussion be resumed in the light of what had taken place at the above conference. In December 1928 Mr. King offered the return of the resources and a continuation of the then-existing subsidy of \$562,500 rather than one which would increase in proportion to the population. This proved unacceptable. Similar terms were offered Saskatchewan and refused.

The report of the Turgeon Commission presented on May 30, 1929, recommended (1) the return to Manitoba of the resources hitherto unalienated; (2) the continuation of the annual subsidies in their entirety as set out in the Alberta and Saskatchewan Acts and (3) the payment to Manitoba of the sum of \$4,584,212.49 in respect of subsidies payable before 1908. The Commission's findings were accepted by the Governments of both the Dominion and the provinces.

Agreements for the transfer of the natural resources were signed with Manitoba and Alberta on December 14, 1929 and with Saskatchewan on March 20, 1930. By the Acts (20-21 Geo. V, c. 3; 20-21 Geo. V. c. 29; and 20-21 Geo. V. c. 41) which received the Royal Assent on May 30, 1930 all crown lands, mines, minerals and royalties derived therefrom were to belong to the provinces. Certain lands such as Indian reserves and national parks were reserved to the Dominion, the general principle being that the Prairie Provinces were to be placed in a position of equality with the original provinces of Confederation in respect of the ownership and administration of the natural resources within their boundaries and as regards the revenues accruing therefrom. The Dominion agreed to pay, in the case of Manitoba and Alberta, \$562,500 annually until the population reached 800,000; thereafter \$750,000 until the population reached 1,200,000 and thereafter \$1,125,000, while Saskatchewan was to receive \$750,000 until the population reached 1,200,000 and thereafter \$1,125,000. To compensate Manitoba for the period between its entrance into Confederation in 1870 and July 1, 1908, before which date it received either no subsidy in lieu of public lands or a smaller subsidy than it should have received in order to put it on an equality with the other provinces, the Dominion agreed to pay \$4,584,212.49 with interest thereon at 5 p.c. per annum from July 1, 1929. It was agreed to appoint a Commission to decide what additional compensation, if any, should be paid in order to place Alberta in a position of equality with the other provinces as from its entrance into Confederation in 1905. Saskatchewan claimed that the Dominion had held the resources in trust for the province not only from 1905 but from the time of the surrender of the Hudson Bay Company's rights. It was agreed to have the Courts decide this question and then to appoint a Commission to decide the question of compensation. The resources were transferred to Manitoba on July 15, 1930 and those of Saskatchewan and Alberta on October 1, 1930.

Decisions adverse to Saskatchewan's claim to the resources prior to 1905 were rendered by both the Supreme Court and the Privy Council. On December 29, 1933 Hon. A. K. Dysart, Judge of the Court of King's Bench, Manitoba, Hon. H.V. Bigelow, Judge of the Court of King's Bench, Saskatchewan, and Geo. C. McDonald, Esq., Montreal, chartered accountant were appointed commissioners "to enquire and report as to whether the province of Saskatchewan should receive consideration and to what amount in addition to the sums provided in the agreement transferring the natural resources to the province". On July 19, 1934 Judge Dysart, Mr. Geo. C. McDonald, and Hon. T.M. Tweedie, Judge of the Supreme Court, Alberta, were appointed commissioners to decide what additional compensation, if any, Alberta should receive. At the time of writing these commissions have not yet reported.

The amicable settlement of the natural resources question, one which at times engendered much bitterness, is regarded as a most important achievement in Canada's political history. The attainment of political maturity and full equality of status by the youngest Canadian provinces parallels Canada's attainment of political maturity as one of the equal members of the British Commonwealth of nations. The feeling of the Prairie Provinces was thus expressed by the Premier of Manitoba in 1920:

"We do not disparage the work of the early builders of the Dominion in a task which must have been as formidable as any which has ever been surmounted in such a cause. Their courage in achievement has always commanded admiration and the Prairie Provinces are not without pride in having been able to lend, so to speak, to the Dominion, the immediate resources without which these great national enterprises could never have been effected."

PART 2.—STATISTICAL REVIEW OF PUBLIC FINANCE IN THE PRAIRIE PROVINCES.

Introductory:— Before proceeding to a consideration of provincial finance, we may consider for a moment certain phases of Dominion public finance. The total estimated expenditure of the Dominion on all governmental services in the fiscal year ended March 31, 1934, was \$457,968,585 as compared with \$531,760,983 the previous year and \$186,241,048 in 1914, these figures including capital as well as current expenditures. The great increase in Dominion expenditure since 1913 has, of course, been due mainly to the burden of interest, pension charges, soldiers' civil re-establishment, etc., resulting from the war. The Dominion revenue in 1934 amounted to \$324,471,271, over 80 per cent of which was obtained from taxation and the balance from Dominion lands, interest on investments, fees, fines, forfeitures, etc. Of the taxation receipts about 38 per cent in 1934 was supplied by indirect taxation in the form of customs and excise and the remainder by the income tax, sales tax, tax on cheques, banks, insurance companies, trust and loan companies, business profits tax, etc. The growth of the Dominion revenue, the Dominion expenditure and the net public debt since 1868 is briefly outlined in table 1.

TABLE 1.—Dominion Finances, 1868-1934.

Fiscal Year	Revenue Receipts	Per Capita Receipts ²	Total Expenditure	Per Capita Expenditure ²	Net Debt at End of Year	Net Debt Per Capita ²
	\$	\$	\$	\$	\$	\$
1868	13,687,928	4.05	14,071,689	4.17	75,757,135	22.47
1871	19,335,561	5.55	19,293,478	5.53	77,706,518	22.09
1881	29,635,298	6.85	33,796,643	7.82	155,395,780	35.82
1891	38,579,311	7.98	40,793,208	8.44	237,809,031	49.09
1901	52,514,701	9.78	57,982,866	10.79	268,480,004	49.69
1911	117,780,409	16.34	122,861,250	17.04	340,042,052	47.18
1921	436,292,185	49.64	528,283,199 ¹	60.11	2,340,878,984	266.36
1926	382,893,009	40.51	355,186,423 ¹	37.58	2,389,731,099	252.88
1927	400,452,480	41.55	358,555,751 ¹	37.21	2,347,834,370	243.68
1928	429,642,577	43.68	378,658,440 ¹	38.50	2,296,850,233	233.59
1929	460,151,481	45.88	388,805,953 ¹	38.77	2,225,504,705	221.95
1930	445,916,992	43.68	398,176,246 ¹	39.01	2,177,763,959	213.38
1931	356,160,876	34.33	440,008,854 ¹	42.41	2,261,611,937	218.00
1932	336,721,305	32.05	450,965,540 ¹	42.93	2,375,846,172	226.14
1933	311,126,329	29.21	531,760,983 ¹	49.93	2,596,480,826	243.80
1934	324,471,271	29.95	457,968,585 ¹	42.47	2,729,978,140	251.96

¹ Includes advances to railways or transfers from active to non-active assets.

² Per capita figures for census years are based upon census populations and for intervening years on revised official estimates.

Provincial Revenues and Expenditures:— Provincial Governments in Canada are in the position, under section 118 of the British North America Act, 1867 (30 and 31 Vict., c.3), and the British North America Act, 1907 (7 Edw. VII, c. 11), of having a considerable assured income in subsidies from the Dominion Treasury (see table 6). In addition, through the ownership of their lands, minerals and other natural resources, the provinces are in a position to raise considerable revenues through land sales, sales of timber, mining royalties, leases of water powers, etc. Further, under section 92 of the British North America Act, Provincial Legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province.

In earlier years the Dominion subsidies, together with the revenues arising out of the natural resources of the provinces and fees for specific services rendered to the citizens, nearly sufficed to cover the whole expense of government and rendered a resort to taxation for provincial purposes practically unnecessary in most of the provinces. From the commencement of the twentieth century, however, the Canadian public, more especially in Ontario and the West, began to demand increased services from their Governments, particularly in respect of education, sanitation, and public ownership and operation of public utilities. The performance of these functions necessitated increased revenues, which had in the main to be raised by taxation. Among the chief methods of taxation to be employed has been the taxation of corporations and estates. Prominent among the objects of increased expenditure are education, public

buildings, public works (especially roads and highways), labour protection, charities, hospitals and places of correction.

The total and per capita ordinary revenues and expenditures of the Governments of the Prairie Provinces for their respective fiscal years ended in the census years 1881-1916 and each year thereafter are shown in tables 2 and 3. It should be remembered that there are economic conditions peculiar to some provinces which affect others but little. Some provinces which possess large mineral areas or forest and timber lands derive considerable revenues from such resources and maintain large administrative staffs to control and direct activities connected with them. The ownership of public utility such as hydro-electric power, railways, telephones and other services is more highly developed in some provinces than in others, and while very heavy expenditures are necessarily involved to maintain them, the investments for the public benefit must be considered in any comparative discussion as between provinces. The fact that provincial government is more expensive per head in the western provinces is evident from table 3. This, however, is not to be taken as evidence that the larger services rendered to the public in these provinces are not worth what is being paid for them.

The ordinary revenues of the Prairie Provinces rose \$2,601,653 in 1933 over those of the preceding year but declined \$3,685,456 as compared with 1930. The combined revenues of all provinces declined \$9,356,297, between 1932 and 1933 and \$29,283,309 between 1930 and 1933. Between 1906 and 1931 ordinary expenditures in the Prairie Provinces increased approximately four times while the combined expenditures of all provinces increased five and one-third times. Between 1931 and 1933 per capita expenditures in Manitoba declined \$.88; in Saskatchewan \$3.53; in Alberta \$1.45, and in all provinces \$2.16. For further details see tables 2 and 3.

TABLE 2.—Ordinary Revenues and Expenditures of the Governments of the Prairie Provinces for Their Respective Fiscal Years Ended in the Census Years 1881-1916 and Each Year Thereafter to 1933 with Comparative Figures for All Provinces.

	Manitoba		Saskatchewan		Alberta		Prairie Provinces		All Provinces	
	Receipts	Expenditures	Receipts	Expenditures	Receipts	Expenditures	Receipts	Expenditures	Receipts	Expenditures
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1881	121,867	226,808	-	-	-	-	121,867	226,808	7,858,698	8,119,707
1891	590,484	664,432	-	-	-	-	590,484	664,432	10,693,815	11,628,353
1901	1,008,653	988,251	-	-	-	-	1,008,653	988,251	14,074,991	14,146,059
1906	2,089,652	1,572,691	1,441,258b	1,364,352b	1,425,059d	1,485,914d	4,955,969	4,422,957	23,027,122	21,169,868
1911	4,454,190	4,002,826	2,699,603	2,575,145	3,309,156	3,437,088	10,462,949	10,015,059	40,706,948	38,144,511
1916	5,897,807	6,147,780	4,801,064	5,258,756	5,281,695	6,018,894	15,980,566	17,425,430	50,015,795	53,826,219
1917	6,292,986	6,860,355	5,631,910	5,553,965	6,260,106	6,752,504	18,185,002	19,166,824	57,989,984	60,122,485
1918	6,723,013	7,307,727	7,797,153	6,828,596	7,660,762	8,303,808	22,180,928	22,440,131	69,345,305	66,052,909
1919	8,613,364	8,497,942	8,333,759	8,125,203	9,642,739	9,525,749	26,589,862	26,148,894	76,844,307	76,403,973
1920	9,870,710	10,602,955	9,903,885	8,707,833	10,919,776	10,423,356	30,694,371	29,734,144	92,653,023	88,250,675
1921	9,358,956	10,063,149	11,789,920	12,151,665	11,086,937	13,109,304	32,235,813	35,324,108	102,030,458	102,569,515
1922	7,940,457	8,381,667	11,801,894	13,322,120	9,324,890	11,235,192	29,067,241	32,938,979	116,156,699	112,874,954
1923	10,078,730	10,616,567	12,576,763	12,886,544	10,419,146	10,990,830	33,074,639	34,493,941	117,738,244	132,671,095
1924	10,926,634	10,455,187	12,520,411	12,449,150	10,506,627	11,174,690	33,953,672	34,079,027	127,896,047	135,159,185
1925	7,866,519a	6,824,155a	12,378,755	12,498,933	11,531,026	11,249,433	31,776,300	30,572,521	132,398,729	136,648,242
1926	10,582,537	10,431,652	13,317,398	13,212,483	11,912,128	11,894,328	35,812,063	35,538,463	146,150,904	144,183,178
1927	11,592,758	10,446,285	13,050,217	12,962,217	12,263,401	12,479,381	36,906,376	35,887,883	156,845,780	152,211,883
1928	10,962,317	11,103,109	13,564,893	13,449,632	16,149,896e	15,870,133e	40,677,106	40,422,874	168,109,505	165,538,910
1929	12,150,490	12,344,493	16,096,666	15,971,231	15,265,084	13,686,261	43,512,240	42,001,985	183,598,024	177,542,192
1930	13,922,135	13,637,397	16,561,527c	17,079,469c	15,829,865	15,402,885	46,313,527	46,119,751	188,154,910	184,804,203
1931	13,842,511	14,491,673	14,346,010	18,202,677	15,710,962	18,017,544	43,899,483	50,711,894	179,143,480	190,754,202
1932	14,631,341	14,631,341	11,902,647	17,722,936	13,492,430	18,645,481	40,026,418	50,999,758	168,227,898	183,667,116
1933	12,366,918	14,311,483	14,834,888	15,413,525	15,426,265	17,533,786	42,628,071	47,258,794	158,871,601	173,292,540

a. For eight months. b. Fourteen months ended February 28, 1907. c. Certain minor items amounting to about \$600,000, shown in previous years as ordinary receipts and expenditures have been transferred to the extraordinary classification in the 1930 provincial accounts report. d. Includes small sums of capital revenue and expenditure which cannot be separated. e. Fifteen months ended March 31, 1928.

TABLE 3.—Ordinary Receipts and Expenditures of the Governments of the Prairie Provinces Per Head of Population for Their Respective Fiscal Years Ended in the Census Years 1881-1916 and Each Year Thereafter to 1933.

	Manitoba		Saskatchewan		Alberta		Prairie Provinces		All Provinces	
	Receipts	Expenditures	Receipts	Expenditures	Receipts	Expenditures	Receipts	Expenditures	Receipts	Expenditures
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1881	1.97	3.66	-	-	-	-	1.96	3.64	1.82	1.89
1891	3.86	4.34	-	-	-	-	3.88	4.36	2.21	2.41
1901	3.96	3.88	-	-	-	-	3.95	3.87	2.62	2.63
1906	5.71	4.30	5.59	5.29	7.69	8.02	6.13	5.47	3.72	3.42
1911	9.66	8.63	5.49	5.23	8.85	9.19	7.88	7.54	5.65	5.29
1916	10.65	11.10	7.41	8.12	10.65	12.13	9.41	10.26	6.25	6.73
1917	11.28	12.29	8.51	8.39	12.32	13.29	10.52	11.09	7.19	7.46
1918	11.90	12.93	11.50	10.07	14.67	15.91	12.57	12.71	8.51	8.11
1919	14.93	14.73	11.91	11.61	17.82	17.61	14.63	14.38	9.25	9.19
1920	16.62	17.85	13.59	11.94	19.33	18.45	16.26	15.75	10.83	10.31
1921	15.34	16.50	15.57	16.05	18.85	22.29	16.48	18.06	11.61	11.67
1922	12.89	13.61	15.35	17.32	15.75	18.98	14.70	16.66	13.02	12.66
1923	16.28	17.15	16.17	16.56	17.57	18.53	16.62	17.33	13.07	14.72
1924	17.48	16.73	15.83	15.74	17.60	18.72	16.87	16.93	13.99	14.78
1925	12.45	10.80	15.36	15.51	19.15	18.69	15.58	14.99	14.25	14.70
1926	16.56	16.32	16.22	16.09	19.59	19.56	17.32	17.18	15.50	15.26
1927	17.81	16.05	15.52	15.41	19.37	19.71	17.37	16.89	16.28	15.80
1928	16.51	16.72	15.74	15.60	24.54	24.12	18.63	18.51	17.09	16.83
1929	17.95	18.23	18.23	18.09	22.32	20.01	19.39	18.72	18.31	17.70
1930	20.21	19.79	18.34	18.91	22.36	21.75	20.14	20.05	18.43	18.10
1931	19.77	20.70	15.56	19.74	21.46	24.61	18.65	21.54	17.27	18.38
1932	20.75	20.75	12.26	18.25	18.23	25.20	16.80	21.41	16.01	17.48
1933	17.13	19.82	15.60	16.21	20.38	23.16	17.54	19.45	14.87	16.22

Table 4 analyses the chief sources of ordinary revenue in the Prairie Provinces during the period 1916-31. The sharp increase in ordinary provincial taxation (covering taxation of corporations, lands, succession duties and amusements) will be noted. In addition to this ordinary taxation, provincial revenues have been augmented by the control of the liquor traffic, the issuance of licences and permits for motor vehicles and by the imposition of taxes on gasoline sales, etc.

The increased use of motor vehicles between 1916 and 1929 is demonstrated by the growing revenues from licences and permits issued by the Provincial Governments and the enforced curtailment in such use in later years by the falling off in such revenue (see also pages 108-9). The increase in the revenue from gasoline taxes indicates not only an increase in the use of motor vehicles but also an increased use of the gasoline tax as a source of provincial revenue. Manitoba's gasoline tax, imposed in 1923 at the rate of one cent per gallon, has been increased several times and is now 7 cents per gallon, Saskatchewan's gasoline tax is now 6 cents as compared with 3 cents in 1928 and Alberta's gasoline tax 6 cents as compared with 2 cents in 1922. More stringent regulations regarding refunds to users of motor vehicles for certain purposes have also been imposed.

The provincial revenues from the liquor traffic have increased considerably of late years. The adoption of government control of the sale of liquor in all but one province has resulted in trading profits, licensing revenues, and permit fees. Prior to the adoption of government control such revenues were not available to the provinces.

TABLE 4.—Principal Ordinary Revenues of Provincial Governments, 1916-31.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
Taxation of Corporations, Lands, etc.					
1916	474,801	294,326	708,239	1,477,366	7,270,889
1921	1,315,390	3,660,171	2,397,461	7,373,022	18,377,230
1926	3,173,353	3,997,248	2,804,015	9,974,616	24,810,721
1929	1,734,451	3,262,755	2,577,203	7,574,409	24,447,782
1930	2,606,009	3,048,475	2,478,650	8,133,134	26,553,017
1931	2,098,351	2,506,295	2,211,166	6,815,812	26,113,237
Succession Duties					
1916	304,497	44,380	148,832	497,709	4,714,829
1921	457,563	331,370	172,598	961,531	8,546,923
1926	422,199	337,354	253,611	1,013,164	13,446,519
1929	732,897	410,626	383,102	1,526,625	13,657,536
1930	1,033,564	468,893	897,302	2,399,759	20,296,757
1931	452,023	323,007	552,767	1,327,797	18,650,659
Motor Vehicles					
1916	137,699	111,153	130,535	379,387	1,436,272
1921	524,234	945,783	718,531	2,188,548	7,857,752
1926	667,609	1,717,983	1,136,578	3,522,170	15,276,478
1929	961,645	2,434,335	2,124,972	5,520,952	21,687,812
1930	1,092,810	2,017,630	2,023,414	5,133,854	20,261,666
1931	1,092,386	1,884,484	1,693,757	4,670,627	19,922,459
Gasolene Tax					
1916	-	-	-	-	-
1921	-	-	-	-	-
1926	432,391	-	423,778	856,169	6,186,183
1929	669,781	1,299,666	1,306,627	3,276,074	17,237,017
1930	763,834	981,907	1,793,252	3,538,993	20,956,590
1931	1,184,753	1,918,833	1,931,603	5,035,189	23,859,067
Amusement and Race Track Meetings					
1916	18,766	12,477	54,714	85,957	589,441
1921	339,927	34,133	224,784	598,844	3,634,981
1926	356,920	35,216	243,764	635,900	4,971,948
1929	409,947	38,963	370,869	819,779	4,488,099
1930	436,933	44,357	396,844	878,134	4,771,468
1931	352,879	36,966	290,257	680,102	3,974,900
Subsidies and Allowances from Dominion Government					
1916	1,582,209	1,950,660	1,758,302	5,291,171	12,158,920
1921	1,821,379	3,088,647	2,261,601	7,171,627	13,940,101
1926	1,804,168	2,835,659	2,389,001	7,028,828	14,500,355
1929	1,819,113	3,115,974	2,379,930	7,315,017	16,386,687
1930	1,823,893	3,268,850	2,367,388	7,460,131	16,664,970
1931	1,880,675	3,134,986	2,557,419	7,573,080	16,664,942
Liquor Traffic Control					
1916	864	213,209	12,624	226,697	992,095
1921	80,000	18,973	250,755	349,728	2,004,483
1926	698,129	732,022	1,941,333	3,371,484	12,416,775
1929	1,993,559	1,563,465	2,893,785	6,450,809	28,342,926
1930	2,044,981	3,631,098 x	2,586,435	8,262,514	33,781,109
1931	1,866,783	1,417,353	1,888,338	5,172,474	32,065,774

xSee Note on next page.

TABLE 4.--Principal Ordinary Revenues of Principal Governments, 1916-31 - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
Interest					
1916	604,029	152,932	204,335	961,296	1,852,885
1921	1,153,580	477,729	244,143	1,875,452	4,020,546
1926	1,204,267	812,082	436,997	2,453,346	6,242,524
1929	1,225,032	649,088	611,725	2,485,845	5,406,078
1930	1,305,940	505,019	700,379	2,511,338	5,852,683
1931	1,684,128	309,236	1,041,514	3,034,878	5,161,342
Legal Fees and Court Fines					
1916	390,885	1,045,612	736,727	2,173,224	4,347,874
1921	614,482	1,302,815	1,279,571	3,196,868	6,731,655
1926	532,718	930,710	879,219	2,342,647	6,760,712
1929	546,471	1,223,626	1,031,754	2,801,851	7,543,083
1930	534,707	1,066,545	1,044,856	2,644,108	7,327,178
1931	450,197	889,315	1,216,676	2,556,188	5,650,677
Public Utilities and Enterprises					
1916	1,887,066	257,750	-	2,144,816	3,752,897
1921	870,631	478,860	-	1,349,491	6,548,457
1926	488,284	460,805	-	949,089	11,373,121
1929	924,115	524,819	-	1,448,934	12,762,905
1930	980,730	721,453	5,839(a)	1,708,022	4,375,197
1931	1,028,588	870,839	5,529(a)	1,904,956	3,685,602
Forests Timber and Woods					
1916	-	-	-	-	5,186,254
1921	-	-	-	-	11,077,069
1926	-	-	-	-	12,957,000
1929	-	-	-	-	12,921,871
1930	-	4,159	-	4,159	10,578,338
1931	90,096	138,379(b)	121,639	350,114	10,284,293
Mines and Mining					
1916	-	-	1,713	1,713	1,666,881
1921	-	-	281,158	281,158	2,646,394
1926	-	-	280,118	280,118	2,982,657
1929	-	-	15,140	15,140	3,018,978
1930	-	-	12,978	12,978	3,379,311
1931	38,493	26,909	383,240	448,642	3,071,439

(a) In addition the earnings of Government Telephones were \$3,826,017 in 1930 and \$3,600,556 in 1931. (Expenditures on Government Telephones in Alberta were \$3,670,827 in 1930 and \$3,744,726 in 1931).

(b) Including fisheries.

† The large increase in revenue from liquor traffic control in 1930 was due to book policy in taking all profits of liquor traffic together with reserves and placing them in current revenues of the year.

At a conference between treasury officials of the several provinces and the Dominion Bureau of Statistics held in 1933 a new scheme of classification of provincial accounts was drawn up and provincial financial statistics beginning with the year 1932 are now being compiled on the new basis. Table 5 shows the revenue from taxation in each province for the years 1926 to 1933 inclusive as based on the classification adopted at the above-mentioned conference. The items included under the heading of taxation are (1) taxation of corporations, taxes on lands, mining, fire prevention, income, personal and poll taxes; (2) succession duties; (3) gasoline tax; (4) taxes on amusements and race track meets. Fees, licences and permits of a legal or regulation character are not included.

TABLE 5.--"A" - Taxation Revenue of Provincial Governments for Their Fiscal Years Ending 1926 to 1933.

	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total
Fiscal Year Ending	Dec. 31	Sept. 30	Oct. 31	June 30	Oct. 31	April 30	April 30	1/March 31	March 31	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1926	301,481	1,657,652	1,535,305	6,055,681	19,358,732	4,407,096	4,334,602	3,561,940	8,236,244	49,448,733
1927	249,475	1,383,171	1,240,345	7,885,658	21,128,677	4,603,214	4,163,202	3,666,945	8,399,747	52,720,434
1928	356,443	1,614,483	1,263,201	9,234,497	16,660,144	3,850,399	3,703,199	2/ 754,795	8,959,211	2/46,396,372
1929	422,503	1,951,299	1,455,824	11,643,554	22,697,194	4,171,647	4,978,994	4,492,912	8,531,174	60,345,101
1930	422,890	2,167,583	1,492,758	13,668,864	29,135,956	5,353,082	4,499,275	5,376,264	10,689,094	72,805,766
1931	403,459	2,183,862	1,625,802	15,086,305	28,522,486	4,712,145	4,748,135	4,764,274	10,863,094	72,909,562
1932	467,892	3,039,489	1,719,547	13,109,016	28,264,572	4,309,007	3,277,944	3,970,660	11,029,851	69,187,978
1933	504,373	2,710,606	1,759,694	12,774,644	30,185,126	5,071,646	4,849,739	5,068,439	11,328,296	74,252,563

1/ The fiscal year ending of Alberta was December 31st for 1926 and 1927 and March 31st from 1928 to 1933.

2/ Alberta figures are for three months only.

In the case of Quebec taxes on amusements and race meets are not considered as ordinary revenue but are given over to the Public Charities Fund in Trust, to which are added specific taxes for hospital benefits on hotel restaurant, etc., meals costing thirty-five cents and over. There is also a certain amount deducted from ordinary revenue from liquor trading profits turned over to the Public Charities Fund. These special funds for Quebec are shown in table "B".

TABLE 5.--"B" - Public Charities Fund (In Trust)
(Receipts from special taxes on amusements, race meets, etc. and also from liquor trading profits)

	Tax Receipts	Liquor Commission
	\$	\$
1926	798,670	-
1927	1,167,337	-
1928	995,171	-
1929	1,401,450	-
1930	1,294,948	1,000,000
1931	1,211,082	1,000,000
1932	1,301,059	300,000
1933	1,429,764	1,000,000

Formerly the revenues from motor vehicle licences, liquor permits and trading profits in connection with liquor traffic control were considered as a form of taxation and there are some who still think that such revenues should be so classified. The Conference, above mentioned, decided that revenue from motor vehicles and liquor permits should be classified under licences and that from liquor traffic control profits under trading activities.

TABLE 5.--"C" - Revenue of Provincial Governments from Liquor Traffic Control (Trading Profits and Permits), 1926-33.

	Prince Edward Island	Nova Scotia	New Brunswick	1/Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1926	57,000	122,487	294,313	5,081,877	1,083,802	698,129	732,022	1,941,333	2,405,812	12,416,775
1927	15,000	167,973	344,221	5,700,000	4,750,366	727,464	615,829	2,184,362	2,509,261	17,014,476
1928	-	244,392	880,541	7,000,000	8,130,390	926,163	613,995	2/ 582,648	2,752,230	2/21,130,359
1929	-	221,503	1,522,497	8,500,000	8,496,000	1,993,559	1,563,465	2,893,785	3,152,117	28,342,926
1930	-	261,558	1,544,303	10,410,573	8,465,000	2,044,981	3,631,098x	2,586,435	4,837,161	33,781,109
1931	-	774,358	1,220,065	9,833,333	10,875,000	1,866,783	1,417,353	1,888,338	4,190,544	32,065,774
1932	27,000	516,571	911,540	8,900,000	9,260,000	1,490,041	872,637	1,423,467	3,421,842	26,823,098
1933	30,000	343,553	545,253	5,000,000	6,000,000	1,094,287	1,066,457	1,427,000	2,321,713	17,828,263

1/Exclusive of amounts paid to Public Charities Fund, see Table "B".

2/Alberta figures are for three months only.

x For an explanation of large increase, see note on page 130.

TABLE 5.—"D" - Revenue of Provincial Governments from Motor Vehicle Licences, 1926-33.

	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1926	67,441	601,033	555,919	2,787,550	6,371,150	667,609	1,717,983	1,136,578	1,371,215	15,276,478
1927	81,928	677,378	616,272	3,307,174	5,917,134	738,833	1,510,263	1,319,492	1,613,793	15,782,267
1928	99,495	754,972	744,623	3,915,503	6,388,250	863,883	2,265,836	1/ 784,355	1,772,368	1/17,589,285
1929	115,415	765,887	782,319	4,742,875	7,753,643	961,645	2,434,335	2,124,972	2,006,721	21,687,812
1930	145,996	996,104	874,998	5,424,537	5,446,759	1,092,810	2,017,630	2,023,414	2,239,418	20,261,666
1931	136,075	1,133,759	863,372	5,412,980	5,516,671	1,092,386	1,884,484	1,693,757	2,188,975	19,922,459
1932	122,456	1,268,437	835,605	5,275,206	7,164,486	976,040	1,066,744	1,466,662	1,984,938	20,160,574
1933	95,008	1,027,474	758,450	5,027,355	7,218,734	893,504	1,597,371	1,544,183	1,888,448	20,050,527

1/Alberta figures are for three months only.

Further detailed statistics covering the financial activities of all provinces prepared on the basis adopted at the recent Conference will be available shortly and may be obtained upon application to this Bureau.

Details of the income in subsidies from the Dominion Treasury accruing to the several provinces since Confederation are shown in table 6. The income of the Prairie Provinces from this source amounted to \$150,267,777 or 31.4 p.e. of the payments to all provinces.

TABLE 6.—Subsidy Allowance^x from July, 1867 to Close of the Fiscal Year ended March 31, 1934.

Province	Allowances for Government	Allowances per Head of Population	Special Grants 1/	Interest on Debt Allowance 2/	Total
	\$	\$	\$	\$	\$
Prince Edward Island	3,720,000.00	5,225,441.60	4,664,304.44	2,564,055.81	16,173,801.85
Nova Scotia	7,530,000.00	23,312,009.60	826,980.00	3,182,710.71	34,851,700.31
New Brunswick	6,890,000.00	17,778,076.00	9,780,000.00	1,397,635.00	35,845,711.00
Quebec	9,280,000.00	82,431,532.60	-	5,196,792.21	96,908,324.81
Ontario	9,680,000.00	102,078,987.79	-	4,886,104.14	116,645,091.93
Manitoba	6,735,000.00	16,748,585.20	19,894,232.76	13,350,619.65	56,728,437.61
Saskatchewan	5,496,666.67	15,303,613.60	17,031,250.00	11,755,875.00	49,587,405.27
Alberta	5,156,666.67	11,945,642.67	15,093,750.00	11,755,875.00	43,951,934.34
British Columbia	6,130,000.00	12,177,367.20	7,300,000.00	1,846,300.62	27,453,667.82
TOTAL	60,618,333.34	287,001,256.26	74,590,517.20	55,935,968.14	478,146,074.94

1/Compensation for lands and allowances for buildings. 2/Allowance in lieu of debt.

^x For the fiscal years 1928, 1929, 1930, 1931, 1932, 1933 and 1934, pending reconsideration of provincial subsidies, special annual grants were made as follows: Nova Scotia, \$875,000 per annum; New Brunswick, \$600,000 per annum; Prince Edward Island, \$125,000 per annum. These are not included in the above table, but a special payment to Manitoba of \$4,822,843 on account of subsidy in lieu of public lands from 1870 to 1908, as provided for in the Manitoba Natural Resources Act of 1930, was included in 1931.

In addition to these allowances, the Dominion Government has, from time to time, made special grants to assist the provinces in providing facilities and services considered desirable for the benefit of the people at large. Thus, we have the grant of \$10,000,000 for agricultural education (3 Geo. V, Ch. 5) which lapsed in 1923, the similar grant of \$10,000,000 in aid of technical education in 1919 (9-10, Geo. V., Ch. 73), and the highways grant of \$20,000,000 in five years to assist the provinces in their good roads schemes. The period of operation of this Act was extended to April 1, 1928. Of the highways grant, Manitoba received \$1,602,265, Saskatchewan \$1,806,255 and Alberta \$1,477,810, or over 24 p.e. of the total. The amounts paid to the Prairie Provinces under the Technical Education Act of 1919 and that of 1931 which replaced it are shown in table 7.

TABLE 7.—Payments to the Prairie Provinces by the Dominion Government under the Technical Education Acts of 1919 and 1931.*

	Manitoba	Saskatchewan	Alberta	Total
	\$	\$	\$	\$
1920	4,487	809	23,374	28,670
1921	10,154	7,027	65,508	82,689
1922	21,174	13,665	82,606	117,445
1923	25,121	18,264	71,020	114,405
1924	20,092	18,397	57,614	96,103
1925	19,500	17,249	62,216	98,965
1926	19,489	20,084	72,732	112,305
1927	20,056	18,021	85,789	123,866
1928	27,529	17,048	74,000	118,577
1929	28,527	25,160	92,222	145,909
1930	41,542	60,506	21,780	123,828
1931	38,621	198,290	-	236,911
1932	27,488	170,095	-	197,583
1933	46,169	75,568	-	121,737
1934	23,064	45,971	-	69,035

*The Technical Education Act of 1931 which replaced the Act of 1919, made available further grants (of about three-fourths the annual amounts under the earlier Act) for a period of fifteen more years.

Alberta was the only one of the three provinces to qualify for the full grant to which it could become entitled under the Act, though in 1930 and later years Saskatchewan greatly expanded its activities in the technical field.

Provincial Expenditures— Table 8 shows the channels through which flow the bulk of governmental expenditures. The expansion of governmental activities is demonstrated by the increase in Civil Government charges of nearly three times since 1916 for the Prairie Provinces and slightly more for all provinces. Interest charges for the Prairie Provinces increased over four times since 1916. Expenditures on education in the Prairie Provinces increased steadily from approximately \$3 millions in 1916 to nearly \$10 millions in 1931. This increase is, however, proportionately less than that for all provinces. Mothers' allowances in 1931 accounted for \$1,482,000 expenditure in the three provinces. In 1916 the only expenditure under this head was \$7,025 in Manitoba. Expenditures on health and sanitation, hospitals, charities, have increased very rapidly since 1916. Old age pensions, non-existent in 1916, accounted for \$2,325,000 expenditure in the Prairie Provinces in 1931.

TABLE 8.—Principal Ordinary Expenditures of Provincial Governments, 1916-31.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
Legislation					
1916	206,694	231,868	157,069	595,631	1,833,100
1921	212,646	218,697	464,022	895,365	2,658,339
1926	160,228	405,508	312,665	878,401	2,477,637
1929	197,577	254,598	236,268	688,443	2,646,685
1930	211,355	496,835	229,005	937,195	3,354,140
1931	222,616	350,349	407,430	980,395	2,835,041
Civil Government					
1916	238,079	457,183	528,787	1,224,049	4,011,701
1921	529,115	981,581	932,831	2,443,527	7,928,896
1926	571,239	967,647	882,176	2,421,062	9,000,224
1929	767,263	1,100,525	959,744	2,827,532	10,286,106
1930	753,097	1,124,037	1,074,422	2,951,556	11,169,480
1931	861,688	1,327,256	1,232,896	3,421,840	12,128,674

*See note next page.

TABLE 8.--Principal Ordinary Expenditures of Provincial Governments, 1916-31 - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
Interest					
1916	1,327,220	893,102x	855,451	3,075,773	7,817,844
1921	3,022,144	1,620,454x	2,306,246	6,948,844	19,818,266
1926	4,027,201	2,127,670x	3,799,411	9,954,282	37,366,925
1929	4,026,694	2,362,569x	4,280,799	10,670,062	41,207,090
1930	4,299,599	2,722,623	4,390,722	11,412,944	35,186,305f
1931	4,442,508	3,202,882	5,039,366	12,684,756	36,748,366f
Sinking Funds					
1916	-	75,608	87,285	162,893	627,632
1921	-	186,960	212,501	399,461	943,416
1926	147,085	34,736	388,183	570,004	3,357,789
1929	184,994	28,151	501,604	714,749	3,672,478
1930	203,811	28,151	525,943	757,905	4,206,977
1931	228,276	28,151	695,554	951,981	4,725,131
Public Buildings, Roads and Works					
1916	2,004,185	597,690	1,567,491	4,169,366	10,652,373
1921	1,246,323	1,821,014	2,999,556	6,066,893	16,387,111
1926	961,591	1,774,492	1,212,052	3,948,135	23,586,855
1929	1,560,744	3,294,425	1,474,519	6,329,688	33,627,661
1930	1,752,067	2,832,450	1,943,314	6,527,831	37,564,724
1931	1,944,818	2,434,644	2,389,850	6,769,312	36,707,703
Education					
1916	1,068,910	1,003,944	1,094,132	3,166,986	9,964,552
1921	2,131,678	2,443,002	2,299,961	6,874,641	20,474,528
1926	2,002,203	3,748,948	2,155,953	7,907,104	26,160,997
1929	2,221,027	3,776,438	2,542,387	8,539,852	30,671,176
1930	2,290,970	3,901,258	2,713,065	8,905,293	33,245,544
1931	2,350,387	4,226,833	3,141,800	9,719,020	34,487,613
Agriculture					
1916	58,684	192,811	543,861	795,356	1,937,679
1921	206,017	576,101	598,439	1,380,557	3,371,937
1926	97,967	232,550	392,303	722,820	3,903,202
1929	128,731	314,104	419,068	861,903	4,747,212
1930	160,339	473,056	512,426	1,145,821	5,526,928
1931	144,338	381,862	538,631	1,064,831	6,360,677
Forests Timber and Woods					
1916	-	-	-	-	861,072
1921	-	-	-	-	1,431,103
1926	-	1,000	-	1,000	3,069,178
1929	-	-	-	-	4,144,964
1930	-	-	-	-	4,714,052
1931	125,175	27,923	25,370	178,468	5,556,188

x Interest on funded debt only.

f The decline in the interest payments of all provinces in 1930 and 1931 was due to the fact that the Nova Scotia Power Commission and the Ontario Hydro-Electric Power Commission paid the interest on their bonds, this having been previously paid by the Government.

TABLE 8.—Principal Ordinary Expenditures of Provincial Governments, 1916-31 - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
Legal Administration					
1916	507,886	898,106	731,415	2,137,407	5,182,299
1921	793,876	1,326,496	1,265,295	3,385,667	7,890,601
1926	642,252	1,079,369	1,019,800	2,741,421	7,601,364
1929	844,592	995,690	1,051,703	2,891,985	9,402,476
1930	840,560	1,468,124	1,071,115	3,379,799	10,707,268
1931	896,767	1,485,628	1,163,144	3,545,539	10,228,957
Mothers' Allowances					
1921	453,914	103,210	207,144	764,268	1,125,777
1926	448,767	301,280	314,524	1,064,571	3,549,491
1929	563,741	397,605	363,924	1,325,270	4,405,596
1930	512,258	499,275	397,155	1,408,688	3,555,422
1931	490,605	524,970	466,536	1,482,111	4,129,863
Old Age Pensions					
1929	315,384	293,989	-	609,373	-
1930	610,489	532,559	306,768	1,449,816	4,043,982
1931	708,780	901,289	714,892	2,324,961	5,136,294
Colonization					
1916	38,227	-	15,048	53,275	214,201
1921	76,875	-	7,958	84,833	600,115
1926	21,978	-	28,899	50,877	1,264,585
1929	-	-	17,275	17,275	751,121
1930	-	4,282	20,066	24,348	823,241
1931	-	11,144(a)	22,440	33,584	765,954
Health and Sanitation					
1916	30,000	-	13,152	43,152	149,004
1921	35,000	140,190	167,115	342,305	734,281
1926	25,000	84,626	96,141	205,767	1,029,964
1929	25,000	221,410	144,835	391,245	2,023,796
1930	158,146	245,987	150,517	554,650	2,332,983
1931	183,753	249,213	164,785	597,751	2,654,737
Hospitals					
1916	230,161	325,143	174,772	730,076	3,936,834
1921	553,424	771,577	628,703	1,953,704	8,864,862
1926	720,875	913,950	758,276	2,393,101	10,031,977
1929	985,969	1,270,754	1,116,156	3,372,879	12,852,539
1930	1,125,941	1,524,612	1,250,830	3,901,383	14,039,626
1931	1,121,229	1,545,471	1,292,531	3,959,231	12,782,496
Charities					
1916	221,155	20,500	19,342	260,997	604,617
1921	342,679	85,669	57,364	485,712	940,059
1926	203,608	101,760	133,743	439,111	1,158,618
1929	327,211	155,251	160,936	643,398	1,386,375
1930	364,670	187,495	187,334	739,499	1,615,389
1931	368,138	205,945	191,605	765,688	1,743,404
Correctional Institutions					
1916	39,347	9,333	39,508	88,198	684,631
1921	108,330	42,012	94,787	245,129	1,530,415
1926	95,211	35,720	81,075	212,006	1,740,617
1929	91,993	36,147	93,622	221,762	1,991,202
1930	84,852	45,883	117,208	247,943	2,282,923
1931	61,137	48,215	125,279	234,631	1,615,266

(a) Including harvest labour.

Provincial Debts and Assets:— The total direct liabilities of the Prairie Provinces amounted to \$418,809,826 in 1933, showing a steady increase since 1918 when they were but \$102,270,899. In the same period the direct liabilities of all provinces increased from \$289,974,216 to \$1,436,366,413. In addition to the direct liabilities there are certain indirect liabilities consisting principally of guarantees by provincial governments for loans to or bonds issued by railways and municipal institutions. These amounted to \$52,689,663 in 1933 for the Prairie Provinces and to \$229,844,566 for all provinces.

TABLE 9.—Direct and Indirect Liabilities of the Governments of the Prairie Provinces with Comparative Figures for All Provinces, 1918-33.

Direct Liabilities					
	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
1918	39,530,479	29,645,837	33,094,583	102,270,899	289,974,216
1919	46,610,583	32,413,340	35,674,160	114,698,083	334,472,087
1920	60,565,734	38,016,003	44,587,763	143,169,500	409,756,192
1921	73,054,507	45,928,262	68,438,866	187,421,635	565,470,552
1922	78,900,821	51,448,807	76,377,599	206,727,227	640,404,105
1923	82,199,499	55,158,455	84,010,266	221,368,220	739,680,608
1924	84,999,738	57,309,575	90,901,271	233,210,584	832,013,500
1925	84,219,977	58,118,615	95,670,360	238,008,952	857,257,360
1926	85,523,127	58,316,504	103,007,998	246,847,629	893,499,812
1927	88,003,110	58,028,682	(a)110,342,869	(a)256,374,661	(a)915,206,840
1928	91,995,078	59,292,654	110,342,869	261,630,601	963,138,740
1929	98,705,271	66,729,579	115,548,417	280,983,267	1,034,071,264
1930	105,940,743	81,178,245	127,465,842	314,584,830	1,140,953,696
1931	112,214,653	102,575,953	142,248,524	357,039,130	1,276,629,289
1932	124,558,810	134,068,943	149,601,000	408,228,753	1,369,703,667
1933	119,679,917	143,737,629	155,392,280	418,809,826	1,436,366,413
Indirect Liabilities					
1918	29,122,689	-	-	29,122,689	118,956,190
1919	30,299,172	-	-	30,299,172	118,768,634
1920	30,466,362	-	-	30,466,362	132,805,930
1921	31,573,102	-	-	31,573,102	139,223,502
1922	32,681,599	-	-	32,681,599	149,346,838
1923	33,193,163	30,624,756	31,608,897	95,426,816	211,345,399
1924	34,153,459	30,414,498	27,954,935	92,522,892	211,691,906
1925	34,003,354	30,214,948	25,648,897	89,867,199	211,109,962
1926	34,541,082	30,320,179	25,412,688	90,273,949	212,919,673
1927	34,374,473	28,860,228	(a)26,398,839	(a)89,633,540	(a)211,901,414
1928	34,325,435	28,847,839	26,398,839	89,572,113	222,826,051
1929	34,531,093	30,432,518	26,268,600	91,232,211	224,470,266
1930	(b)32,925,345	(b)30,997,564	(b)9,803,140	(b)73,726,049	207,439,645
1931	(b)12,561,666	(b)34,147,875	(b)11,072,397	(b)57,781,938	210,668,231
1932	(b)10,006,647	(b)34,383,034	(b)11,133,390	(b)55,523,071	209,977,397
1933	(b)8,763,271	(b)33,933,480	(b)9,992,912	(b)52,689,663	229,844,566

(a) Alberta interim Public Accounts report ending December 31st, 1927, did not show a balance sheet, therefore the figures as shown for March 31, 1928 (new fiscal year ending) are taken.

(b) Guarantees for bank loans to Canadian Co-operative Wheat Producers Limited are not included.

Bonded Indebtedness:— Of the total liabilities of the provinces the major part is represented by bonded debt owing to the public in Canada and abroad. Table 10 shows the total bonded debt of the Prairie Provinces for their respective fiscal years, from 1916 onwards, with comparative figures for all Canada.

In addition to regularly defined bonded debt, the provinces, in order to tide over temporary emergencies have resorted to short term borrowings which are commonly known as Treasury Bills, and constitute a sort of floating debt. Table 11 shows the total of these borrowings 1916-33.

The bonded debt of the three Prairie Provinces which, in 1916 amounted to \$83,688,518 or \$49.29 per capita, had increased to \$333,985,807 or \$137.44 per capita by 1933. The combined bonded debt of all the provinces increased from \$218,875,927 or \$27.41 per capita to \$1,224,372,822 or \$114.78 per capita in the same period. Treasury Bills outstanding, which in 1917 amounted to \$1,250,000 for the three provinces amounted to \$60,328,793 in 1933. Comparative figures for all provinces were \$3,750,000 and \$110,249,983 respectively.

TABLE 10.--Bonded Indebtedness of the Prairie Provinces, 1916-33.
(Exclusive of Treasury Bills)

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
1916	30,396,274	24,292,044	29,000,200	83,688,518	218,875,927
1917	31,196,870	25,439,187	30,595,200	87,231,257	235,054,463
1918	33,890,870	28,019,387	31,500,200	93,410,457	255,223,566
1919	36,897,870	29,963,410	34,635,200	101,496,480	283,735,184
1920	49,700,870	35,237,170	41,989,900	126,927,940	349,513,773
1921	61,929,870	41,785,436	59,010,257	162,725,563	490,692,231
1922	66,331,121	49,685,476	67,373,279	183,389,876	575,477,355
1923	67,914,095	52,807,876	78,522,279	199,244,250	638,190,108
1924	69,637,095	52,492,956	78,594,760	200,724,811	701,906,279
1925	66,658,595	50,493,376	81,459,407	198,611,378	704,225,134
1926	64,433,595	54,114,176	86,894,666	205,442,437	708,677,426
1927	67,293,828	56,944,576	90,890,458	215,128,862	742,388,684
1928	69,822,828	58,309,256	90,899,816	219,031,900	769,260,373
1929	71,465,161	58,275,776	96,532,443	226,273,380	817,940,202
1930	76,641,161	73,667,316	106,888,380	257,196,857	919,142,905
1931	81,381,906	85,141,205	106,866,573	273,389,684	1,016,647,165
1932	89,630,906	101,831,231	128,970,593	320,432,730	1,148,323,084
1933x	90,938,906	109,209,641	133,837,260	333,985,807	1,224,372,822
<u>Per Capita</u>					
1916	54.87	37.49	58.47	49.29	27.41
1917	55.91	38.43	60.23	50.48	29.21
1918	59.98	41.33	60.34	52.92	31.38
1919	63.95	42.80	64.02	55.83	34.19
1920	83.67	48.34	74.32	67.23	40.91
1921	101.52	55.20	100.36	83.24	55.91
1922	107.68	64.61	113.81	92.76	64.61
1923	109.72	67.88	132.41	100.12	70.93
1924	111.42	66.36	131.65	99.71	76.87
1925	105.47	62.65	135.31	97.36	75.87
1926	100.83	65.91	142.92	99.34	75.08
1927	103.37	67.71	143.59	101.24	77.14
1928	105.15	67.64	138.14	100.29	78.32
1929	105.56	66.00	141.13	100.83	81.66
1930	111.24	81.58	150.97	111.82	90.16
1931	116.26	92.34	145.99	116.14	98.10
1932	126.42	109.14	174.28	134.52	109.45
1933	125.95	114.84	176.80	137.44	114.78

x Against this were sinking funds as follows: Manitoba, \$3,846,030; Saskatchewan, \$6,205,017; Alberta, \$7,399,533; All Provinces \$73,851,241 in 1933.

TABLE 11.—Treasury Bills Outstanding, End of Fiscal Years 1916-33.

	Manitoba ^x	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
1916	-	-	-	-	2,000,000
1917	800,000	450,000	-	1,250,000	3,750,000
1918	2,425,000	590,000	-	3,015,000	9,065,000
1919	4,643,000	1,457,500	-	6,100,500	20,410,500
1920	4,769,000	1,500,000	-	6,269,000	23,939,000
1921	2,238,188	3,241,753	-	5,479,941	29,004,541
1922	2,695,515	920,000	-	3,615,515	18,318,515
1923	4,605,160	1,852,918	-	6,458,078	33,561,078
1924	7,798,208	4,294,546	-	12,092,754	38,571,895
1925	9,273,208	7,142,245	-	16,415,453	53,169,515
1926	11,594,208	3,441,239	-	15,035,447	70,649,967
1927	9,846,208	616,700	-	10,462,908	56,649,084
1928	9,967,832	453,785	-	10,421,617	69,705,650
1929	13,249,183	4,599,272	-	17,848,455	77,393,524
1930	13,810,610	1,093,021	-	14,903,631	71,778,325
1931	14,769,829	7,875,543	9,935,000	32,580,372	86,570,072
1932	18,920,233	26,888,470	7,750,318	53,559,021	103,707,603
1933	22,795,649	30,810,092	6,723,052	60,328,793	110,249,983

^xFrom 1923 to 1933 exchequer bonds are also included in treasury bills for Manitoba.

The rapid rise in the bonded debt of the provinces in the period under review is accounted for largely by the development of public ownership of utilities, the extension of the highways and good roads systems in all provinces, the cultural training advances and requirements for the promotion of industrial activities and public and social welfare. These demanded heavy expenditures which could not easily be met out of current revenue, and the borrowings, while increasing the public debt, are in the main considered justifiable, as the public utilities are meeting from their revenues the interest on indebtedness incurred in their construction, and the provincial assets generally are sound enough to take care of capital investment for other services which are necessary to develop the country.

Interest payments of Provincial Governments have naturally increased in proportion to their growing indebtedness. The interest on Manitoba's bonded and debenture debt, exclusive of Treasury Bills, in the fiscal year 1933 amounted to \$4,510,905, on that of Saskatchewan \$4,809,258 and on that of Alberta \$5,160,067. These charges are offset to a considerable extent by interest from investments. For instance, Manitoba's interest revenue from telephones was, in 1933, \$1,044,366, from Judicial Debentures \$85,806 and from drainage districts \$281,977. In Saskatchewan the interest revenue derived from telephones in 1933 was \$649,361, from Pool Elevators, \$32,867, from Pool Elevators, \$32,867, from Co-operative Creameries, \$5,328, from the Power Commission, \$294,876, and from the Farm Loan Board \$409,904. Alberta received for interest on investments \$210,189, on loans to elevators \$22,447, on advances to telephone \$23,741. In addition the Telephone Commission out of its earnings paid \$1,428,901 interest on its share of Government bonded debt. The total interest revenue from these principal items of investment alone amounted to \$5,615,323 as against the total expenditure on interest charges for bonded debt of \$14,480,230.

Provincial Assets:—The liabilities of the Provincial Governments are to a considerable extent offset by corresponding assets, some of which are earning assets as in the case of the telephone systems of the Prairie Provinces.

Again the debenture debt incurred on account of highways outstanding was in 1933, \$18,009,982 for Manitoba; \$28,951,736 for Saskatchewan and \$32,829,997 for Alberta and \$438,118,659 for all provinces. While these systems cannot be considered as realizable assets, the interest charge on them may be considered as being met out of the large revenues derived from the gasoline tax and fees from motor vehicle permits. Highway construction, responsible for a considerable portion of bonded debt, has brought indirectly to the people considerable revenue from motor tourist expenditures. Railways, good roads and drainage systems have also made accessible rich natural resources hitherto lying

dormant as well as opening up new territory for settlement and development. Back of all this is the value of the natural resources which, although not realizable in times like the present, may through their development assist in wiping off the obligations which mature in the years to come. A summary of provincial assets is presented in table 12. These include accounts receivable and inventories, bank deposits, Dominion Government grants, investments, lands, loans and advances for educational purposes, aids to agriculture, livestock and dairying, public utilities, etc., provincially owned utilities such as grain elevators, hydro-electric power, telephones, etc., also provincial Government buildings and sites, public institutions, roads, bridges, etc.

TABLE 12.—Assets of the Governments of the Prairie Provinces,
with Comparative Figures for All Provinces, 1918-31.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
1918	54,185,401	53,444,166	53,039,059	160,668,626	343,933,728
1919	62,426,087	69,033,131	55,193,655	186,652,873	401,832,572
1920	76,262,326	75,630,040	67,280,464	219,172,830	476,344,103
1921	88,555,388	83,353,139	138,547,880	310,456,407	663,345,811
1922	93,271,397	87,461,849	122,591,629	303,324,875	717,866,813
1923	94,895,846	91,031,837	128,527,131	314,454,814	875,951,510
1924	98,437,817	92,899,588	133,855,117	325,192,522	954,021,778
1925	97,166,678	88,788,736	139,204,981	325,160,395	941,032,033
1926	99,261,997	87,891,485	146,965,028	334,118,510	1,009,061,817
1927	102,626,933	87,170,160	159,525,493x	349,322,586x	1,054,846,733x
1928	106,366,465	94,514,446	159,525,493	360,406,404	1,112,825,399
1929	112,009,931	118,717,720	170,559,145	401,286,796	1,192,015,322
1930	119,416,854	127,615,889	184,644,753	431,677,496	1,294,747,098
1931	124,044,532	147,338,461	198,812,003	371,114,996	1,526,319,818

* Alberta interim Public Accounts report ending December 31, 1927 did not show a balance sheet, therefore, the figures as shown for the new fiscal year ending March 31, 1928 are taken.

Municipal Finance:- Under the provisions of the British North America Act, the municipalities are the creations of the Provincial Governments. Their organization and their powers differ in different provinces, but almost everywhere they have very considerable powers of local self-government. Owing to the different types of municipal organization in the provinces, it is difficult to obtain comparable statistics. The service defrayed by provincial taxation in one province may be met out of municipal taxation in another, though it may matter little to the taxpayer to which the payment is made. Again, there are considerable areas in all the provinces having no municipal organization and consequently no municipal taxation but the benefits derived from the community are correspondingly less e.g. various services such as water supply and fire protection, commonly provided out of taxation by the municipality, must be provided by private initiative or done without. Larger cities render more numerous services to taxpayers than smaller ones and consequently municipal taxes are higher. Naturally, therefore, municipal taxation per capita is higher in a highly urbanized province than in one which is largely rural. In Alberta and Saskatchewan there exist local improvement districts not yet organized into rural municipalities where the taxes are levied, collected and expended by the Provincial Governments.

The cost of municipal government, like the cost of provincial and Dominion government, has greatly increased since the pre-war period, principally due to the increased services demanded from municipal bodies. Among such public services which play a large part in municipal expenditures may be mentioned education, roads and highways, sanitation, fire and police protection, and charities and social relief. Thus the aggregate taxes imposed by the municipalities of Manitoba increased from \$9,449,000 in 1914 to \$20,598,300 in 1932, in Saskatchewan from \$13,358,627 to \$24,388,477, in Alberta from \$9,791,846 to \$15,453,640 in the same period.

Throughout the Dominion, the chief basis of municipal tax revenue is the real estate within the limits of the municipalities; though in certain provinces personal property, income, and business carried on are also taxed. General taxes are normally assessed at the rate of so many mills on the dollar of the assessed valuations. In the

Prairie Provinces the values of improvements made to real property are often rated at a very low figure, e.g., in Saskatchewan, where the taxable valuations of buildings are about 12 p.c. of the taxable valuations of lands, and in Alberta, where they are about 28 p.c. of the taxable valuations of lands. Land valuations in the West, which in earlier years were somewhat inflated, have of late been assessed on a sounder basis, and in some provinces the Equalization Boards have placed a more equitable valuation on lands as among the various rural municipalities.

The period of depression was responsible for a very considerable delinquency in tax payments, while the heavy and increasing burden of unemployment relief since 1930, which has been carried by the municipalities with help from the Provincial and Dominion Governments, has caused many of them to search for increased revenues in all possible directions. In some cases the general municipal rates have been increased, in others the water rates have been advanced and the various forms of municipal licensing have been called upon to contribute in increasing measure during the emergency.

Municipal assessment valuations in the Prairie Provinces, 1919-32, with comparative totals for all provinces are shown in table 13. Taxes levied by municipalities in the Prairie Provinces during the years 1914-32 are shown in table 14, while total and per capita municipal tax receipts by provinces during the years 1926-33 are shown in table 15.

TABLE 13.—Municipal Assessment Valuations, 1919-32

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
Taxable Real Property					
1919	467,857,405	1,071,035,320	407,589,725	1,946,482,450	6,028,012,649
1920	484,802,829	1,110,741,107	448,602,809	2,044,146,745	6,339,627,201
1921	674,574,091	1,062,500,515	795,285,387	2,532,359,993	7,053,622,719
1922	660,708,101	1,057,679,940	786,863,141	2,505,251,182	7,182,259,586
1923	638,136,316	1,054,500,190	774,579,601	2,467,016,107	7,278,783,852
1924	605,396,598	1,065,588,958	769,313,656	2,540,299,212	7,442,478,964
1925	576,380,525	1,055,521,188	620,373,850	2,252,275,563	7,331,785,535
1926	560,330,739	1,053,795,564	583,173,277	2,197,299,580	7,456,907,285
1927	548,220,390	1,053,878,152	579,547,416	2,181,645,958	7,564,935,640
1928	539,913,667	1,059,402,904	609,496,539	2,208,813,110	7,753,091,861
1929	540,852,995	1,083,773,225	561,630,140	2,186,256,360	8,202,728,986
1930	541,847,002	1,091,299,416	645,417,883	2,278,564,301	8,467,559,699
1931	539,012,367	1,089,729,394	579,960,105	2,208,701,866	8,222,259,998
1932	536,413,841	1,088,167,082	571,119,947	2,195,700,870	8,241,504,012
Total Taxable Valuations					
1919	467,857,405	1,071,035,320	419,725,052	1,958,617,777	6,351,703,960
1920	484,802,829	1,122,191,915	463,220,082	2,070,214,826	6,726,420,258
1921	674,574,091	1,102,143,875	802,853,764	2,579,571,730	7,459,687,640
1922	681,203,084	1,097,153,880	801,949,057	2,580,306,021	7,671,904,274
1923	657,999,717	1,089,905,021	785,216,602	2,533,621,340	7,755,399,953
1924	624,404,428	1,106,256,491	777,022,491	2,507,683,410	7,944,082,882
1925	594,994,624	1,095,525,787	763,060,747	2,453,581,158	7,942,858,546
1926	580,350,270	1,095,691,782	592,287,676	2,268,329,728	7,949,806,250
1927	567,504,166	1,096,712,908	589,832,919	2,254,049,993	8,078,996,737
1928	559,315,719	1,103,620,560	616,430,432	2,279,366,711	8,214,700,746
1929	561,589,490	1,131,845,681	570,611,780	2,264,046,951	8,695,606,429
1930	563,694,049	1,139,415,260	656,203,618	2,359,312,927	8,985,770,048
1931	557,103,129	1,134,460,775	595,745,117	2,287,309,021	8,752,118,963
1932	552,296,364	1,129,447,552	589,424,200	2,271,168,116	8,791,349,010

TABLE 13.--Municipal Assessment Valuations, 1919-32 - Cont'd.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
Exemptions					
1919			Not available		811,935,964
1920			" "		863,271,405
1921			" "		996,457,971
1922	137,298,287.		" "		1,157,419,824
1923	136,339,289		" "		1,230,862,366
1924	139,314,881		" "		1,333,534,706
1925	135,430,071		" "		1,365,631,825
1926	142,448,743		" "		1,301,289,196
1927	143,570,522		" "		1,355,210,436
1928	144,748,168		" "		1,373,142,743
1929	144,991,311		" "		1,395,088,651
1930	147,666,868		" "		1,460,936,727
1931	156,793,923		" "		1,598,349,761
1932	158,588,317		" "		1,645,698,641

Table 14.--Taxes Levied for General School and Other Purposes by Municipalities in the Prairie Provinces, 1914-32.

	Manitoba	Saskatchewan	Alberta
	\$	\$	\$
1914	9,449,270	13,358,627	9,791,846
1915	9,817,044	14,329,921	8,598,375
1916	10,782,227	15,647,421	5,933,247
1917	11,373,801	16,986,519	6,615,466
1918	13,285,744	19,788,254	10,005,580
1919	13,747,466	23,848,380	9,864,672
1920	16,078,985	26,987,033	13,263,408
1921	19,688,486	29,589,398	12,368,656
1922	19,302,894	27,825,915	4,370,544 (a)
1923	19,159,821	27,660,056	17,582,007
1924	17,954,490	26,887,277	14,362,821
1925	18,265,773	26,590,987	16,343,919
1926	17,543,487	26,963,494	12,632,855 (b)
1927	17,531,302	26,725,070	16,663,405
1928	17,907,723	27,944,728	16,390,316
1929	19,463,666	28,563,828	15,974,979
1930	19,322,697	29,404,844	15,174,880
1931	19,082,975	26,459,090	15,449,253
1932	20,598,300	24,388,477	15,453,640

(a) Cities not shown.

(b) Towns not shown.

TABLE 15.-- Total Municipal Tax Receipts, By Provinces, 1926-33.

	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba ^{2/}	Saskatchewan	Alberta	British Columbia
	\$	\$	\$	\$	\$	\$	\$	\$	\$
926	-	6,397,612	2,800,180	67,779,258	106,230,080	(No	26,300,069	12,433,696	14,858,435
927	136,402	6,576,609	2,452,424	71,044,091	112,872,880	{	26,241,928	10,572,853	15,208,181
928	130,972	6,801,365	2,409,170	62,619,679	117,791,527	(Statist-	27,369,597	9,583,254	16,153,676
929	161,354	6,813,918	2,427,977	69,450,228	127,664,383	(ics	26,612,226	11,005,241	17,217,523
930	161,359	6,642,094	2,464,833	73,337,620	132,209,929	(Available	20,799,829	10,424,676	17,989,046
931	168,646	6,605,580	2,598,910	73,761,481	133,513,288	6,448,963	18,392,914	10,255,692	18,260,430
932	145,830	6,613,675	2,441,063	79,612,584	131,755,503	17,290,889	17,616,444	12,032,471	17,089,972
933	-	6,440,471	-	-	128,089,995	17,104,553	-	11,661,595	17,521,554

^{1/} Charlottetown only.

^{2/} Cities of St. John, Moncton and Fredericton only..

Cities not included in 1931.

TABLE 15.--Total Municipal Tax Receipts, By Provinces, 1926-33 - Cont'd.
Per Capita

	Prince/Edward Island	Nova Scotia	New2/ Brunswick	Quebec	Ontario	Manitoba3/	Saskatchewan	Alberta	British Columbia
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1926	-	12.42	7.07	26.04	33.57	-	32.03	20.45	24.52
1927	1.56	12.77	6.16	26.74	35.06	-	31.20	16.70	24.41
1928	1.48	13.21	6.01	23.06	35.93	-	31.75	14.56	25.20
1929	1.83	13.23	6.01	25.05	38.29	-	30.14	16.09	26.32
1930	1.83	12.92	6.07	25.96	39.05	-	23.03	14.72	26.61
1931	1.91	12.88	6.37	25.66	38.90	10.00	19.95	14.01	26.31
1932	1.63	12.74	5.91	27.36	37.92	24.39	18.88	16.26	24.27
1933	-	12.34	-	-	36.35	23.69	-	15.40	24.61

1/ Charlottetown only. 2/ Cities of St. John, Moncton and Fredericton only. 3/ Cities not included in 1931.

Bonded Indebtedness of Municipalities:— Like other Canadian governing bodies the municipalities of the greater part of Canada borrowed rather too freely during the years between 1917 and 1932. The bonded indebtedness of Prairie Province municipalities rose from \$162,018,640 in 1919 to \$228,601,950 in 1932. In the same period the total bonded indebtedness of all municipalities throughout Canada rose from \$729,946,826 to \$1,385,070,941. For further details see table 16, Sinking funds offsetting gross bonded debt held by municipalities in the Prairie Provinces at the close of 1932 amounted to \$32,325,732 for Manitoba, \$14,549,525 for Saskatchewan and \$28,687,360 for Alberta.

TABLE 16.--Bonded Indebtedness of All Classes of Municipalities, 1919-32.

	Manitoba	Saskatchewan	Alberta	Prairie Provinces	All Provinces
	\$	\$	\$	\$	\$
1919	55,562,788	39,585,388	66,870,464	162,018,640	729,946,826
1920	57,820,588	40,611,271	57,205,275	155,637,134	776,970,958
1921	65,463,239	41,180,255	53,429,558	160,073,052	837,529,603
1922	68,811,040	59,719,165	60,832,650	189,362,855	919,286,396
1923	73,908,953	59,011,174	70,999,611	203,919,738	971,321,573
1924	73,944,105	57,763,699	65,414,317	197,122,121	1,044,102,680
1925	79,211,867	55,835,505	57,908,593	192,955,965	1,016,156,317
1926	80,716,272	54,844,759	56,950,712	192,511,743	1,050,415,711
1927	83,017,302	54,361,158	62,414,660	199,793,120	1,100,813,615
1928	85,651,906	53,092,330	63,428,853	202,173,089	1,134,346,348
1929	85,901,404	54,913,100	78,473,392	219,287,896	1,194,199,817
1930	84,879,707	59,000,183	78,645,803	222,525,693	1,271,626,695
1931	91,615,195	59,146,592	78,679,571	229,441,358	1,341,886,959
1932	92,471,256	59,238,281	76,892,413	228,601,950	1,385,070,941
<u>Per Capita</u>					
1919	96.29	56.55	123.60	89.12	87.97
1920	97.34	55.71	101.25	82.43	90.95
1921	107.32	54.40	90.87	81.88	95.43
1922	111.71	77.66	102.76	95.78	103.21
1923	119.40	75.85	119.73	102.47	107.95
1924	118.31	73.03	109.57	97.92	114.35
1925	125.33	69.27	96.19	94.59	109.48
1926	126.32	66.80	93.67	93.09	111.28
1927	127.52	64.64	98.60	94.02	114.38
1928	128.99	61.59	96.40	92.57	115.49
1929	126.88	62.19	114.73	97.72	119.23
1930	123.19	65.34	111.08	96.75	124.73
1931	130.88	64.15	107.48	97.47	129.49
1932	130.42	63.49	103.91	95.97	132.01

It is quite evident that the task of making available provincial revenues cover expenditures has been no easy one even in normal times and that financial difficulties have been greatly intensified by the abnormal conditions prevailing during the past five years. Unusually heavy expenditures for unemployment and farm relief have coincided with a drastic shrinkage of taxable capacity and limited borrowing possibilities. While all provinces have been affected in greater or lesser degree, the western provinces, with their relative lack of diversification of industry and with drought and crop failure in certain sections, have been particularly hard hit. The depreciation of the foreign exchange value of the Canadian dollar in 1932 and 1933 in conjunction with maturing foreign obligations increased the difficulties of Canadian Governments.

Recognizing the existence of a national emergency the Dominion Government has, in various ways, aided the provinces in bearing the extraordinary burdens imposed by prevailing conditions.

Dominion Unemployment Relief Measures:- The Dominion Unemployment Relief Act, 1930, appropriated \$20,000,000 to be spent either for the purpose of immediate relief or for assisting public works undertaken to provide employment. The sum of \$4,000,000 was set aside to provide for the payment to municipalities of one-third of their expenditures in the direct relief of persons for whom work could not be procured, the provincial governments and the municipalities each being required to assume responsibility for one-third of the expenditure for this purpose.

The Unemployment and Farm Relief Act, 1931, provided that moneys might be expended from the Consolidated Revenue Fund "for the construction, extension or improvement of public works, buildings, undertakings, railways, highways, subways, bridges and canals, harbours and wharves, and any other works and undertakings of any nature or kind whatsoever; assisting in defraying the cost of the production, sale and distribution of the products of the field, farm, forest, sea, river and mine; assisting provinces, cities, towns, municipalities, and other bodies or associations, by loaning moneys thereto or guaranteeing repayment of moneys thereby, or in such other manner as may be deemed necessary or advisable; taking all such other measures as may be deemed necessary or advisable for carrying out the provisions of the Act." No specific amounts were set forth for unemployment and farm relief, the amount of unemployment in each province governing the amount approved for expenditure.

The Unemployment and Farm Relief Continuance Act, 1932, extended the provisions of the above Act from March 1 to May 1, 1932. The Relief Act, 1932, which received the Royal Assent on May 13, 1932, made provision for special relief works and undertakings in the National Parks of Canada and for the continuance of the relief measures undertaken and being carried on at the cost of Canada, in the drought-stricken area of Saskatchewan by the Saskatchewan Relief Commission, and for taking all such other measures deemed necessary. It had been decided, at a conference held in Ottawa on April 9, 1932, between representatives of the Dominion and provincial governments that, under any relief measures adopted for the coming year, public works would be discontinued in preference to direct relief, owing to that relatively small amount of actual relief which it had been found possible to distribute under the former.

Agreements were completed with all the provinces except Prince Edward Island, providing for a non-recoverable expenditure of one-third of an amount not to exceed \$600 per family for the purpose of providing a measure of self-sustaining relief to families who would otherwise be in receipt of direct relief by placing such families on the land. It was provided that the remaining two-thirds of the expenditure should be contributed by the provinces and the municipality concerned. The agreements covered a period of two years until March 31, 1934.

The Dominion Government continued to contribute to the direct relief expenditures of the provinces and municipalities on receipt of certified accounts, and also contributed 50 p.c. of the cost of operating board camps, wherein the unemployed might be cared for and useful work carried out in return for subsistence and a small cash allowance.

Agreements were entered into with the four western provinces, whereby the Dominion paid 100 p.c. of the cost of providing food, fuel, clothing and shelter to single homeless unemployed persons at a cost not exceeding 40 cents per day. The agreements also provided for the placement of single homeless unemployed persons on farms at \$5 per month payable by the Dominion.

The Relief Act, 1933, which received Royal Assent on March 30, 1933, provided that the Governor in Council might provide for special relief works and undertakings in the National Parks of Canada and elsewhere; assist in defraying the cost of the sale and distribution of the products of field, farm, forest, sea, river and mine; take all such other measures as may be deemed necessary or advisable for carrying out the provisions of the Act.

Under this Statute, agreements were completed between the Dominion and the provinces whereby the Dominion continued to contribute to the expenditures of the provinces for direct relief, the contribution to organized municipalities being 33 1/3 p.c. with equal contributions from each province and municipality concerned. In the case of unorganized territory the Dominion Government continued to pay 50 p.c. of the provincial expenditures for direct relief. In the four western provinces the Dominion continued to contribute to the care of homeless unemployed persons, the contribution of the Dominion being 20 cents per day per individual cared for in camps and urban centres, and \$5 per month for each individual placed on a farm.

Under the agreements contributions were also made by the Dominion for approved work in connection with the construction of the Trans-Canada Highway and also for provincial roads and undertakings and work carried out by municipalities. Relief works in the National Parks were continued as well as the projects inaugurated by the Department of National Defence under the Relief Act, 1932, and arrangements made for additional projects.

The Relief Act, 1934, which received Royal assent on April 20, 1934, provided for the continuance of Dominion contributions on a percentage basis to the direct relief expenditures of the province and municipalities to July 31, 1934. The contribution in the case of relief distributed by municipalities was 33 1/3 p.c. and in the case of relief distributed by the provinces in unorganized districts, 50 p.c. The administration of the Act was vested in the Minister of Labour.

The Dominion also continued to operate the camps established under the provisions of the Relief Act, 1932, by the Department of National Defence at various points throughout Canada, also the special relief works carried out in the National Parks for the care of single homeless persons and unemployed residents of the parks.

On July 30, 31 and August 1, 1934, the Premiers of the various provinces or their representatives met at Ottawa, at which time the Dominion announced that after July 31 contributions towards the direct relief expenditures of the provinces on a percentage basis would be replaced by a monthly grant-in-aid in an amount to be determined on the basis of need.

It was further stated at the conference that the Dominion would, at the request of the provinces, extend the date for completion of any works approved under the Relief Act, 1933, which were not completed on the date of expiration of that Act, namely March 31, 1934, and that any provincial works for the relief of unemployment which the provinces might be desirous of undertaking would be considered by the Dominion on their merits.

Under the provisions of the Relief Act, 1932, agreements were completed with all the provinces except Prince Edward Island, providing for a non-recoverable expenditure of one-third of an amount not to exceed \$600 per family for the purpose of providing a measure of self-sustaining relief to families who would otherwise be in receipt of direct relief by placing such families on the land. It was provided that the remaining two-thirds of the expenditure should be contributed by the province and the municipality concerned. The agreements covered a period of two years and expired on March 31, 1934.

Under the provisions of the Relief Act, 1934, agreements, effective from April 1, 1934, to March 31, 1936, providing continuity of settlement with the agreements which expired March 31, 1934, were entered into with all the provinces excepting Prince Edward Island and British Columbia. Provision is made in the new agreements for an additional non-recoverable contribution by the Dominion, on the recommendation of the province and with the approval of the Governor in Council, of one-third of an amount not exceeding \$100 in the case of a settler who may not be self-supporting at the end of the two-year period, and for whom subsistence expenditure during the third year of settlement is deemed necessary. This additional amount for subsistence during the third year where necessary applies both to those settled under the 1932 agreement and those settled under the 1934 agreement.

Reports received from the provinces in regard to the number of settler families and the total number of individuals approved and settled under both the 1932 and 1934 agreements as at October 20, 1934, are as follows:

TABLE 17.--Number of Settler Families and Individuals Approved and Settled under the 1932 and 1934 Relief Acts' Agreements.

Province	Settler Families	Total Individuals	Province	Settler Families	Total Individuals
	No.	No.		No.	No.
Nova Scotia	298	1,885	Saskatchewan	846	4,163
Quebec	738	4,510	Alberta	459	2,153
Ontario	495	2,416	British Columbia	46	257
Manitoba	457	2,155	TOTALS	3,339	17,539

Under the Relief Act, 1934, agreements have been entered into with the provinces of Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba and Alberta providing generally for monthly grants-in-aid for the eight months August 1, 1934, to March 31, 1935, the provisions of the agreements under the 1933 Act having been, in the main, made operative for the four months April 1, 1934, to July 31, 1934. In August, 1934 and in November, 1934 "grants-in-aid" were made to British Columbia and Saskatchewan respectively. Further to the monthly grants-in-aid, provision was made for carrying to completion with Dominion Government assistance such undertakings covered by the 1933 agreements which had not been completed by March 31, 1934, and which the province concerned requested should be so completed. Dominion assistance to construction on the Trans-Canada Highway was also continued.

In addition up to November 3, 1934, loans were made to the western provinces, under the authority of the Relief Act, 1934, amounting to \$23,643,800. These loans were made for various purposes including: direct relief, highways, agricultural relief, for re-loan to municipalities and to meet interest and maturing obligations (see table 19).

In the Prairie Provinces the Dominion undertook to again provide for the placement of single homeless unemployed persons on farms and to grant all so placed \$5 each per month. Also, effective from September 1, 1934, to March 31, 1935, the Dominion undertook to pay one-half the net cost to the provinces of:-

- (1) Movement of settlers with their effects and live stock from the dried-out areas to suitable locations;
- (2) Movement of cattle from dried-out areas to suitable locations;
- (3) Movement of feed and fodder into dried-out areas;

and effective from September 12, 1934, until March 31, 1935, the Dominion undertook to pay one-half the net cost of:

- (a) Freight on live cattle shipped under provincial certificate from dried-out areas to stockyards within those provinces where abattoirs were located;
- (b) Freight on such tannage and boneless beef from the point of manufacture to the point of marketing;

the province to also pay one-half of said freight charges.

The Dominion moreover undertook to continue its relief camps for single homeless men under the Department of National Defence with the limit set at a personnel of 28,000.

During the session of 1934 "The Public Works Construction Act, 1934" was passed, the preamble to which read, in part, as follows:

"Whereas it is in the national interest that the Dominion of Canada should undertake the construction of certain public works and undertakings for the general advancement of the country and to accelerate recovery to more normal economic conditions; and whereas the construction and execution of the works mentioned in the Schedule hereto will tend to increase employment and reduce expenditures for relief purposes."

This Act provided for an appropriation or not more than \$40,000,000 for the construction of federal public works in all nine provinces of the Dominion, the Northwest Territories and Yukon.

The following table sets forth the Dominion's disbursements under relief legislation since 1930 to October 20, 1934.

TABLE 18.--Total Dominion Expenditures under Relief Legislation 1930 to October 20, 1934
"000" omitted

Item	1930 Act	1931 Act	1932 Act	1933 Act	1934 Act to October 20, 1934	Total
	\$	\$	\$	\$	\$	\$
Disbursements to Provinces -						
Prince Edward Island	95	136	25	87	21	365
Nova Scotia	836	1,084	540	1,036	309	3,805
New Brunswick	504	768	222	512	174	2,179
Quebec	3,460	5,485	4,110	3,220	1,488	17,763
Ontario	4,693	11,101	7,888	9,667	6,260	39,608
Manitoba	1,633	3,359	1,739	2,184	1,114	10,029
Saskatchewan	1,919	3,008	1,151	807	689	7,574
Alberta	1,286	3,063	1,285	1,201	768	7,605
British Columbia	1,376	3,954	3,227	2,578	1,732	12,867
Disbursements through Dominion Government Departments	57	4,537	1,047	7,441	3,192	16,273
Other Disbursements -						
Saskatchewan Relief Commission	-	5,373	4,460	1,314	665	11,811
Board of Railway Commissioners	500	500	-	-	-	1,000
Canadian Pacific Railway	864	209	-	-	-	1,073
Canadian National Railway	882	-	-	-	-	882
Administration Expenses	43	85	67	84	42	322
Miscellaneous	-	72	15	59	2	148
TOTALS	18,148	42,734	25,776	30,190	16,456	133,304

Loans by the Dominion Government to the provinces under the authority of relief legislation beginning with the Unemployment and Farm Relief Act 1931 are shown in table 19. These loans (for direct relief, highways, agricultural relief, for re-loan to municipalities to meet interest and maturing obligations, etc.) have been secured by treasury bills of the respective provinces bearing interest in the neighbourhood of 5 p.c. The sum total of such loans outstanding as at March 31, 1934 was \$51,314,180.

TABLE 19.--Loans to Provincial Governments on Account of Relief Expenditures, by Provinces,
Fiscal Years ended March 31, 1932-34.

Province and Item	1932	1933	1934
	\$	\$	\$
<u>Manitoba -</u>			
Loans during year	4,331,486	6,476,711	2,384,000
Less cash repayments and credits of			
Dominion's share of expenditures	<u>1,542,674</u>	<u>1,304,807</u>	<u>110,717</u>
Net loans for year	2,788,812	5,171,904	2,273,283
Net loans outstanding at beginning of year ..	-	<u>2,788,812</u>	<u>7,960,716</u>
Totals outstanding March 31, Manitoba		2,788,812	7,960,716
			10,233,999
<u>Saskatchewan -</u>			
Loans during year	12,034,934	9,734,337	6,960,066
Less cash repayments and credits of			
Dominion's share of expenditures	<u>1,100,593</u>	<u>2,155,782</u>	<u>1,490,826</u>
Net loans for year	10,934,341	7,578,555	5,469,240
Net loans outstanding at beginning of year ..	-	<u>10,934,341</u>	<u>18,512,896</u>
Totals outstanding March 31, Saskatchewan ...		10,934,341	18,512,896
			23,982,137

Table 19.—Loans to Provincial Governments on Account of Relief Expenditures, by Provinces,
Fiscal Years ended March 31, 1932-34 - Cont'd.

Province and Item	1932	1933	1934
	\$	\$	\$
Alberta -			
Loans during year	5,142,586	2,840,000	4,068,524
Less cash repayments and credits of			
Dominion's share of expenditures	<u>1,044,846</u>	<u>937,959</u>	<u>17,781</u>
Net loans for year	4,097,740	1,902,041	4,050,743
Net loans outstanding at beginning of year.	-	<u>4,097,740</u>	<u>5,999,781</u>
Totals outstanding March 31, Alberta	<u>4,097,740</u>	<u>5,999,781</u>	<u>10,050,524</u>
British Columbia -			
Loans during year	5,784,165	5,382,500	3,535,000
Less cash repayments and credits of			
Dominion's share of expenditures	<u>971,041</u>	<u>4,469,864</u>	<u>2,213,240</u>
Net loans for year	4,813,124	912,636	1,321,760
Net loans outstanding at beginning of year.	-	<u>4,813,124</u>	<u>5,725,760</u>
Totals outstanding March 31, British Columbia	<u>4,813,124</u>	<u>5,725,760</u>	<u>7,047,520</u>
Grand Totals	22,634,017	38,199,153	51,314,190

The Dominion Government also increased its proportion of the net cost of old age pensions from 50 p.c. to 75 p.c. effective from November 1, 1931. Out of a total of \$23,080,000 paid in old age pensions up to September 30, 1934 in the Prairie Provinces, the Dominion contributed \$15,099,000. Comparable figures for all Canada are \$75,279,000 and \$49,274,000 respectively.

The whole problem of Dominion-provincial relations has been brought into sharp relief by the stresses of the past five years. The problem is an extraordinarily complex one and involves too many points of view to be adequately treated here but brief reference may be made to a few salient features.

The twentieth century conception of the functions of Government has, under our constitution, burdened the provinces with responsibilities far in excess of those contemplated by the framers of the British North America Act. On the other hand, constitutional difficulties have prevented the Dominion Government from dealing effectively with urgent economic problems which are national in scope. Various remedies for strengthening provincial budgets have been proposed. These include total or partial relinquishing of direct taxation by the Dominion; Dominion assumption of additional functions as, for instance, the whole cost of old age pensions; higher subsidies; further loans; writing down of the provincial debt to the Dominion and, on the other hand, proposals for greater economy and increased taxation by the provinces. An attempt to assess the merits and demerits of these remedies would require more space than is available in this publication. It may be said in general that certain of the proposed remedies violate the canon of sound public finance that "the spending authority should have the responsibility of finding the revenue", others would give the greatest assistance to the provinces least in need of it and most are but temporary palliatives which fail to solve the basic problem.

The Dominion Government, has, from time to time, increased its financial contributions to the provinces but can hardly be expected, as a permanent policy, to assume financial responsibility for provincial policies over which it has no control. The obvious remedy would seem to be a revision of the constitutional powers of Dominion and provincial governments - a remedy easy of statement but one which has proved extremely difficult of accomplishment. The provinces, while prone to seek Dominion aid in emergencies, have shown little disposition to concede to the Dominion any part of the jurisdiction granted them by the British North America Act. There is undoubtedly great need for a wider realization of the fact that Dominion and provincial interests are complementary rather than antagonistic and that greater co-ordination of effort among the different Canadian governments is a vital necessity. It is an indisputable fact that higher governmental expenditures necessitate higher taxes and that these, whether Dominion, provincial or municipal, must, in the final analysis, come out of the national income of the Canadian people as a whole.

¹Since writing the above a committee of nine members of the House of Commons has been appointed to inquire into the best method by which the British North America Act may be amended.

CHAPTER VIII.--EDUCATION IN THE PRAIRIE PROVINCES

In the autumn of 1818 in a modest log building built by themselves, serving at once as house, chapel and school, the first school on the Canadian prairies was opened by the Rev. Fathers Provencher, Dumoulin and a student ecclesiastic, who had come from Quebec earlier in the same year. It served the French Canadians who had settled on the east bank of the Red river at the point where it is joined by the Assiniboine. (A few months later they opened a second school further up the river at Pembina, but an accurate survey showed it to be in the United States and it was abandoned, many of the settlers moving north to the St. Boniface settlement). In 1820, on the opposite side of the river, amid the Scotch, Irish and English settlers that Lord Selkirk had brought out in the eight years preceding, a school was opened under the direction of the Rev. John West, an Anglican clergyman and the first Protestant minister to the Selkirk settlers. This building, too, was of log and served for residence as well as school. The schoolmaster, Harbridge by name, was assisted by his wife in instructing the girls. Individually the two schools have grown to become St. Boniface College and St. John's College, foremost Roman Catholic and Anglican educational institutions in Western Canada. In a broader sense they have grown ten thousand fold to the 20,000 classrooms that now serve three quarters of a million children west of the Great Lakes.

The Period of Church Schools

Manitoba:- The advance of organized educational effort in the Canadian West for the fifty years from 1820 was confined mainly to the Red River valley and consisted essentially in repetitions of the founding of the two schools described. As new settlements of whites and Indian half breeds appeared, new schools were opened, always on the initiative of the Catholic or Protestant Clergy. Though the first lady teacher had been Mrs. Harbridge, the first Protestant girls' school was opened in 1828, and the first for Catholic girls in 1829, the latter under the direction of a young half breed girl, Angélique Nolin. In 1849, the population of the district was 5,391 and the clergy of each denomination had six schools under their control. There was no system of taxation for school support, and the several schools were sustained by private subscriptions and by missionary grants from England and Eastern Canada. When the Province of Manitoba was constituted in 1870, its population was close to 12,000--1,565 whites, 5,756 French half-breeds, 4,083 English and Scottish half breeds, and 558 Indians. There were 17 Catholic schools, 14 Church of England and 2 Presbyterian with an aggregate attendance of 817 children.

In 1871, a provincial legislature took the place of the old Council of Assiniboia and a law was introduced establishing a provincial school system, thus bringing to a close the period of unaided church-school education in the first settled quarter of the Prairie Provinces. School districts were formed, local trustee boards were elected, a legislative grant administered by a provincial board of education became available to the schools, and a few years later local taxation in support of schools became compulsory.

Saskatchewan and Alberta:- Settlement in the territory that now constitutes Saskatchewan and Alberta was effected somewhat later than in Manitoba. The first missionary to penetrate as far west as Edmonton was the Rev. Rundel in 1840, a Methodist minister who spent several years living and teaching among the Indian tribes. The earliest Catholic mission schools were organized in 1859 by the Sisters of Charity, the Grey Nuns of Montreal, who had first emigrated west and opened a school at St. Boniface fifteen years earlier. But the first school doing regular work west of Manitoba was founded by Father Lacombe at Edmonton in 1862, and the second in 1863 at White Fish Lake by the Rev. George McDougall and his son, both ministers of the Methodist church. The latter a few years later opened the first schools in the south of Alberta. By 1870, several schools had appeared in the territory that now constitutes Saskatchewan. But with the exception of a few schools that were maintained by public subscription in rapidly growing centres, all schools until 1884 were church schools supported by missionary contributions.

In 1884, the government of the North West Territories took charge of educational matters and organized a system of publicly supported schools within its boundaries, as Manitoba had done when created a province fourteen years earlier. In the first year there were 59 schools under public control, 48 Protestant and 11 Catholic.

The First Publicly-Controlled Schools

Manitoba:- The first school law in Manitoba (1871) provided for a provincial board of education consisting of eight clergymen and four laymen, half of each being Roman Catholic and half Protestant. The existing schools came under the control of the board, management of the Catholic schools being given entirely to the Catholic section of the board, and similarly with the Protestant. As noted above, there were fewer than a thousand pupils in

the province, in 33 schools of which 17 were controlled by the Catholic section. In the later seventies, settlement began to spread westward over the province, and at the end of the first decade of provincial status, there were 4,919 children in some 150 schools of which about one-fourth were Catholic. In 1882, Winnipeg established its first high school. In the same year, the Catholic section of the provincial board introduced a normal school training course in St. Boniface, and two years later the Protestant section initiated a similar course in Winnipeg. Previously, nearly all teachers had come from eastern Canada. The inspection of all schools was conducted almost exclusively by clergymen until 1888 when a regular inspectorial staff of five was appointed for the Protestant schools, one of whom—Mr. E. E. Best—continued in office until the summer of 1931.

By 1890, there were 91 schools under the Catholic section of the provincial board and 628 under the Protestant section, with a combined enrolment of about 23,000 pupils. This year witnessed the passing of the Public Schools Act which abolished provision for two distinct sets of denominational schools and sought to bring all publicly-controlled schools under a single system. It provided as an administrative or executive body a Department of Education consisting of the five provincial cabinet ministers and an Advisory Board of seven or nine educationists, the majority to be appointed by the Government, but two by the teachers of the province and one by the university. The Advisory Board was required to frame regulations concerning school premises, text books, teachers' qualifications, examinations, as well as the form of religious exercises permissible in the limited period which the Act allowed to be devoted to them daily. The use of religious exercises was made optional with the local trustee boards. The Act was unsatisfactory to the Catholic population, and after heated controversy and appeals extending over several years, carried to the Privy Council, amendments were added, designed to make it acceptable. By the end of the century the Catholic schools, with the exception of some in Winnipeg and Brandon, had come under the operation of the new Act, which constitutes the basis of the province's school system as it exists today. (In 1908, a separate portfolio of Education was created, and a Minister appointed, thus removing school affairs from the attention of the cabinet as a whole). In 1901, enrolment had reached 51,888.

Saskatchewan and Alberta:— The ordinance of 1884, establishing a publicly-controlled school system in the North West Territories, provided for a board of education composed of two sections, Catholic and Protestant. Each section prescribed for its own schools the text books, programme of studies, qualifications required of teachers, etc. In 1891 and 1892, the system was reorganized, and the board of education replaced by a council of public instruction consisting of the four members of the executive council, and four additional members without votes—two Protestant and two Catholic. By this time, there were 249 schools with 6,170 pupils. In 1901, the advisory members were removed from the administrative council, and constituted a separate advisory body, thus removing completely denominational appointees from the central management of the schools. The option of organizing school districts on denominational lines remained. In 1901, there were 713 schools with some 25,000 pupils, about half the number attending in Manitoba in the same year.

In 1889, the first high school instruction was undertaken, at Regina and Calgary. The work was taught in the same schools as the elementary grades. The first normal school was opened in Regina in 1893 with 62 students.

Schools of the Twentieth Century

The nineteenth century had witnessed the founding of the first schools in the prairies, and with their increasing numbers the transition in control and support from church to state. It had been concerned with laying the foundations on which the present educational structure is built. This it had done quite completely. Even though the provinces of Alberta and Saskatchewan were not constituted until 1905, the transition to provincial autonomy involved no radical changes in educational policy. But the twentieth century, with its flood of immigration and settlement, and its later special circumstances in the war and post-war years, brought with it a host of new problems in adaptation and expansion. In 1901, the population of Manitoba and the area that became Saskatchewan and Alberta was 419,600. In the next ten years, it increased 219 p.c., in thirty years 460 p.c., and the proportion of the total in cities had doubled. In the same time, the school enrolment increased about 600 p.c. and the schools' average daily attendance 900 p.c. The proportion of the population at school on the average day in 1931 was double that of 1901.

The central control of schools in each of the provinces is now vested in a department of the provincial government, the Department of Education. Presiding over it and representing its interests in the Legislature is a Minister of Education who is a member of the government in power for the time being. The permanent head of the Department is the Deputy Minister of Education whose tenure of office continues regardless of changes in the political party in power. At the seat of government he is assisted by several educationists who are specialists in different lines,

and a clerical staff, while throughout the province is a staff of inspectors in the employ of the Department making periodic calls at all schools. Each province has a board of educationists acting in an advisory capacity to the Minister of Education. In Alberta and in Saskatchewan, it consists of five members, all appointed by the Government in each case, and is termed the Educational Council. In Manitoba, it is called the Advisory Board, has thirteen members, the majority similarly appointed but three chosen by teachers and one by inspectors.

The foremost task of each of the Departments consists in assisting and managing, with the help of locally-elected boards of school trustees, the large number of ordinary schools of general education, both elementary and secondary. Except in the larger towns and cities of Saskatchewan, the same local boards everywhere manage both elementary and high schools. And in each of the provinces all but three or four per cent of the pupils in ordinary schools are in schools thus jointly controlled by the Department of Education and elected school boards, and receiving their financial support from the Province and local public money. Supplementing the work of the schools of general education in most of the cities, and similarly controlled, is an increasing number of technical schools offering both day and evening instruction.

In addition to directing the regular schools, each Department makes provision for the education of those unable to attend them. Blind children are sent to special schools in Ontario, British Columbia and Quebec at public expense. Deaf children are similarly provided for in special schools, there being two in the Prairie Provinces, at Winnipeg and Saskatoon. Special classes are maintained in the cities of Winnipeg, Edmonton, Calgary, Regina and Saskatoon for children who are otherwise subnormal physically or mentally. Manitoba has an industrial school for delinquent boys at Portage la Prairie that is also used for Alberta boys, and Saskatchewan has one at Regina. Correspondence courses in the elementary grades are offered by each of the Departments of Education to children out of reach of established schools, and to children whose health does not permit their attendance at school. Saskatchewan has introduced correspondence lessons in the high school grades to assist pupils taking this work in rural schools, and Manitoba has for several years used the radio to broadcast high school lessons. The normal schools, of which there are now three in each province (counting those temporarily closed) are operated by the Departments of Education, and until the recent establishment of education faculties in the universities of Alberta and Saskatchewan they were the only institutions offering the training required for teachers' certificates. In recent years they have trained from 2,500 to 3,000 teachers annually. A very important supplement to their work has developed in the last fifteen years in the summer school for teachers that is conducted in each province under the joint auspices of the Department of Education and the provincial university. The three schools now enrol well over 2,000 every summer.

Outside of the immediate control of the Departments of Education in each province are a few dozen schools conducted by private enterprise or religious denominations. Some of these, especially those under church control, give a general education, others give a commercial or business training only, while some teach trade and technical courses. Altogether they include less than four per cent of the provinces' total school enrolment. There are also the institutions of higher education that are not administered by the Departments. Each province has its higher educational system centralized in a provincially-supported university with a number of affiliated denominational colleges. Finally, there are the Dominion Government schools serving the native Indian population, the number of children enrolled in a year being about 6,000.

The two fundamental groups of institutions among the foregoing, to which all of the others may be considered supplementary, are the regularly organized schools under the provincial Departments, and the university group. Each in turn will be viewed at more length.

The Provincially-Controlled Schools

Generally speaking, the three provinces use the grading system that divides the school course into eight elementary and four secondary grades, the last of which has always been considered a post-graduate year and the general equivalent of the first year of university work. There are exceptions to this generality, such as the growing practice in Manitoba, now also evident in Alberta, of dividing the work of the schools on the 6-3-3 basis. In Saskatchewan, completion of the twelfth year in the schools has in 1934 practically become prerequisite to entering the university, and in Alberta a majority of students come to the university with it completed.

Not only Grade XII, but all of the higher grades have received a tremendously increased proportion of the school enrolment in recent years. There are many ways in which this can be shown, but perhaps one of the most convincing is to show from the census records of school attendance that the average length of a child's schooling has

increased by more than 50 p.c. in the last 20 years. Whereas his attendance was only sufficient to take him into the sixth grade in 1911, he now completes the elementary years and puts in the better part of a year at high school.

TABLE 1.--Average Number of Years Schooling Received per Child, Prairie Provinces and Canada, 1911, 1921, 1931.

	1911	1921	1931
Manitoba	6.15	7.72	8.68
Saskatchewan	4.96	6.95	8.39
Alberta	4.92	7.46	8.82
Canada	6.58	7.58	8.55

In the first ten or fifteen years of the present century, with their huge number of recently-arrived children of continental European origin, it is not surprising that the average length of schooling given was below that of the rest of Canada. The problem then was to provide schools in new settlements and to see that in so far as possible all were given elementary educational opportunities. The fact that the average is now up to that of the Dominion as a whole is evidence enough that the earlier problem has been superseded by the problem of providing advanced facilities of schooling for all; though conditions in the earlier years have left their mark upon such problems as the financing of schools. Twenty or twenty-five years ago, little more than half of the school expenditure of a year was met out of the year's taxes. The rest of the money went to the building of new schools, and payment of it was postponed by the sale of debentures. Before the earlier schools were fully paid for, the provinces were overtaken by demands for high school facilities for all, and this has made school financing difficult in recent years.

This situation is demonstrated at some length in a bulletin of the Education Branch of the Dominion Bureau of Statistics entitled "Recent Trends of Education in the Prairie Provinces", for which the interested reader may apply. The bulletin shows that the school taxes per capita in 1930 were about two-thirds heavier than in 1913. In spite of this, however, and as the above table on length of schooling indicates, a year's schooling is not more expensive in recent years. The increased cost, amounting to two-thirds, is more than offset by the greater length of schooling that is being given to each child.

In some communities the difficulty of school support has increased much more than the average of two-thirds, due to the fact that each small district is responsible, in the main, for the support of its school, independently of others. Less than 20 p.c. of current costs have been paid from provincial treasuries, the balance having been raised by very unequal assessments in different areas. This situation, in turn, has made for inequality of educational opportunity for the children of different communities, and the difficulty has been greatly intensified by the recent years of poor crops in many areas, and low prices for farm products generally. Teachers in some districts have carried on with little or no income except that from the legislature grants. This situation has turned an increased amount of attention to the desirability of a larger unit of school administration and support, with the greater equalization of costs that it would make possible. Manitoba has had one or two municipal school districts for several years that have demonstrated the attractiveness of such an arrangement, and two large units have recently been formed in Alberta with results that are reported as very satisfactory to the people concerned. Consolidation of schools, with the provision of conveyance to a central school, has made a contribution to solution of the problem, but consolidated school districts are usually still too small to include in their area any considerable diversity of occupations or of crop conditions. There are over 200 consolidated schools in the three provinces, half of them in Manitoba, but the number has been practically at a standstill for ten years or more.

In 1932 a Manitoba Committee, representing the School Trustees' Association, the Union of Municipalities, the Teachers' Federation, the Department of Education and the Tax Commission, studied the problem of school administration and finance. Its report recommended that the Provincial Government assume responsibility for minimum instructional costs throughout the province, and that larger units of school administration be established. Though there is a marked resemblance between the findings of the Committee and of students of the problem elsewhere (e.g. State Support for Public Education, by the American Council on Education) its recommendations were not acceptable to the trustees in provincial convention, who presumably reflect the opinion of the local ratepayers throughout the province. There was no objection to some loss in the local obligation of supporting the schools, but the prospect of an accompanying loss in local administrative powers was not welcomed. In time the volunteer experimentation of a few isolated municipalities, such as is now taking place, may serve to convince an increasing number in all three provinces, that it is the most satisfactory arrangement.

Universities and Colleges

The oldest university in Western Canada is the University of Manitoba, founded in 1877. It existed until the opening of the new century only as a degree-conferring body for St. John's College (Anglican), St. Boniface College, (Roman Catholic), Manitoba College (Presbyterian), Wesley College (Methodist), and the Manitoba Medical College, the first three of which were in existence when the University was constituted. Shortly after Manitoba's university began its work as a teaching body, the two provincial universities to the west were organized. The first session of the University of Alberta opened in the fall of 1908, that of the University of Saskatchewan one year later. In their first year the two institutions enrolled 125 students. Last year they had over 3,000 in attendance at the full session, and the University of Manitoba had over 2,500. As the need has arisen, new departments of study have been added and, in Alberta especially, extension activities have become an important part of the university work. Except for theology, these three remain the only degree-granting institutions in the Prairie Provinces.

In addition to a Faculty of Arts and Science, each of the three offers courses in Agriculture, Household Science, Law, Pharmacy, Medicine (Pre-clinical years only in Saskatchewan), Engineering and Applied Science (including Architecture except in Saskatchewan), Education or Teacher Training (not formally a Faculty of the University in Manitoba). Besides the courses they have in common the University of Alberta has Schools of Dentistry, Nursing, and Commerce, while the University of Saskatchewan has Faculties of Accounting, Music and Physical Education.

The University of Manitoba now has three affiliated colleges that teach the full Arts course,—United (Wesley and Manitoba Colleges combined), St. John's, and St. Boniface, the first two of which also teach and grant degrees in theology. Newer colleges that formerly confined their instruction to high school grades have recently been preparing students for examinations in the junior years of the Arts course. Brandon College, (Baptist) is the only one in the province, not affiliated to the provincial university, that offers a full Arts Course. Its students receive their degrees from McMaster University at Hamilton, Ontario.

The University of Saskatchewan has four theological colleges and seven junior Arts colleges affiliated. The theological colleges are Emmanuel (Anglican), St. Andrew's (United), and Lutheran at Saskatoon, St. Chad's (Anglican) at Regina. The Arts colleges are Regina, Luther, Campion, and Sacred Heart at Regina, St. Peter's at Muenster, the Collegiate Institute at Moose Jaw, and Outlook College. They teach only the junior years of the University's curriculum. In the French-Canadian Settlement at Gravelbourg there is an Arts college affiliated to the University of Ottawa.

In Alberta, St. Stephen's College (United, Theological) and St. Joseph's (Roman Catholic, Arts) at Edmonton have for some years been affiliated to the provincial University, and Mount Royal College at Calgary became affiliated as a junior Arts college in 1931. The Jesuits' College (Arts) at Edmonton is affiliated to Laval University, Quebec, and the Oblates' College (junior Arts) to the University of Ottawa. Concordia College (Lutheran) at Edmonton and the Seventh Day Adventist College at Lacombe offer some work of university grade.

TABLE 2.—Historical Summary of Enrolment and Attendance in the Provincially-Controlled Schools of the Prairie Provinces, 1881-1933.

	Annual Enrolment				Average Daily Attendance			
	Manitoba	Saskatchewan	Alberta	Total	Manitoba	Saskatchewan	Alberta	Total
1881	4,919 ^{1/}	-	-	-	-	-	-	-
1891	23,871	-	5,652	29,523	12,443	-	-	-
1901	51,888	-	23,687	75,575	27,550	-	-	-
1906	64,123	31,275	28,784	124,182	34,947	15,770	14,782	65,499
1911	80,848	72,260	61,660	214,768	45,303	38,278	32,556	116,137
1912	-	81,896	70,414	-	-	49,329	39,226	-
1913	83,679	101,463	79,909	265,051	48,163	56,005	45,888	150,056
1914	93,954	113,985	89,910	297,849	58,778	65,009	54,582	178,369
1915	100,963	122,862	97,286	321,111	68,250	72,113	61,112	201,475
1916	103,796	129,439	99,201	332,436	66,561	71,522	60,271	198,354
1917	106,598	142,617	107,727	356,932	69,209	88,758	65,374	223,341

^{1/}Free School system established.

TABLE 2.--Historical Summary of Enrolment and Attendance in the Provincially-Controlled Schools of the Prairie Provinces, 1881-1933 .. Cont'd.

	Annual Enrolment				Average Daily Attendance			
	Manitoba	Saskatchewan	Alberta	Total	Manitoba	Saskatchewan	Alberta	Total
1918	109,925	151,326	111,109	372,360	69,968	91,010	68,489	229,467
1919	114,662	164,219	121,567	400,448	72,072	98,791	74,776	245,639
1920	123,452	174,925	135,750	434,127	88,563	101,355	82,417	272,335
1921	129,015	184,871	124,328	438,214	86,137	113,412	89,401	288,950
1922	136,876	183,935	142,902	463,713	95,433	119,041	100,515	314,989
1923	142,369	194,313	148,045	484,727	98,787	130,499	105,364	334,650
1924	144,491	204,154	147,373	496,018	103,775	139,782	105,852	349,409
1925	145,834	206,595	145,692	498,121	104,312	144,650	105,973	354,935
1926	148,279	213,404	148,245	509,928	106,809	152,430	108,881	368,120
1927	148,763	218,560	151,292	518,615	106,793	157,392	112,401	376,586
1928	150,883	223,049	155,741	529,673	114,270	157,207	116,241	387,718
1929	150,517	227,263	161,235	539,015	116,766	161,658	120,229	398,653
1930	151,846	228,434	164,519	544,799	117,037	169,893	129,371	416,301
1931	153,553	230,492	165,786	549,831	120,703	176,716	134,112	431,531
1932	151,927	229,193	167,675	548,795	122,843	176,916	136,711	436,470
1933	150,070	226,007	168,992	545,069	121,190	175,002	137,558	433,750

TABLE 3.--Money Raised Annually in Support of Publicly-Controlled Schools in the Prairie Provinces, 1885-1933:

	Manitoba			Saskatchewan			Alberta		
	Legislative Grants	Local Assessments	Debentures	Government Grants	Local Assessments	Debentures	Government Grants	Local Assessments	Debentures
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1885	40,916	195,640	-	-	-	-	-	-	-
1895	129,099	481,828	-	-	-	-	-	-	-
1905	218,892	951,911	-	143,056	404,130	246,706	120,723	377,463	208,527
1910	296,115	1,682,238	425,320	557,299	1,369,531	524,740	301,239	1,278,013	673,333
1911	325,410	1,847,380	1,318,068	555,438	1,519,528	659,270	432,876	1,575,412	1,481,173
1912	-	-	-	622,088	1,929,345	1,430,603	414,115	1,793,480	1,491,498
1913	351,745	2,198,459	987,457	722,002	2,913,135	2,075,375	461,289	2,901,214	3,497,863
1914	390,582	2,673,449	1,545,042	867,590	4,451,326	1,037,587	507,682	3,028,776	966,350
1915	468,335	3,047,670	1,738,926	980,296	3,997,392	1,009,025	540,325	3,733,323	951,205
1916	503,774	3,296,667	344,673	969,709	4,694,242	649,300	553,141	3,749,007	155,883
1917	522,293	3,445,239	321,370	1,104,156	4,954,200	-	652,557	3,657,510	268,102
1918	616,977	3,736,452	240,855	1,162,490	5,618,192	455,777	629,830	5,132,232	433,126
1919	589,147	4,200,519	188,931	1,255,094	7,121,047	1,105,602	713,083	5,601,713	655,960
1920	691,981	4,947,186	402,181	1,229,934	8,826,175	1,516,765	885,524	6,894,401	865,195
1921	822,186	6,922,864	2,250,073	1,346,459	9,619,615	1,475,882	1,146,722	7,432,936	814,008
1922	1,058,292	7,991,517	1,832,134	1,779,228	10,090,401	631,219	1,241,518	7,475,582	1,262,120
1923	1,011,048	8,173,986	314,519	1,620,803	10,101,291	810,858	1,117,023	8,282,650	449,376
1924	1,096,010	7,468,737	812,787	1,850,403	10,015,774	551,834	1,054,733	8,327,327	493,989
1925	1,310,067	7,283,360	677,775	1,913,643	10,063,559	720,272	1,084,879	8,197,098	357,103
1926	1,091,151	7,302,044	402,504	2,033,761	10,229,432	883,695	1,137,638	8,241,715	573,401
1927	1,110,575	7,365,798	369,721	2,141,290	10,415,005	1,300,862	1,218,573	8,901,979	503,130
1928	1,191,924	7,555,561	568,937	2,193,889	10,874,672	1,217,825	1,321,158	9,279,494	1,097,006
1929	1,208,809	7,611,029	408,897	2,534,024	11,010,661	1,284,651	1,355,963	9,419,440	1,543,704
1930	1,285,898	7,821,988	446,115	2,406,042	10,163,293	1,410,711	1,593,995	8,854,951	1,335,699
1931	1,310,587	7,675,879	1,071,272	2,161,290	7,609,132	2,239,099	1,511,776	8,931,880	34,534
1932	1,299,625	6,834,536	954,641	1,684,906	6,300,054	933,045	1,675,229	8,366,781	121,054
1933	1,207,836	6,029,404	100,934	-	-	-	-	-	-

1/Saskatchewan's collegiate institutes and high schools are not included in the figures. They numbered 19 in 1932, received \$234,247 in grants, and \$570,552 from local assessments.

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