

Possibilities of Agricultural Development in Canada

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In a previous article the writer showed what were the average yields of wheat per acre in the principal wheat-growing countries of the world, how these had steadily increased in certain countries and in the province of Ontario, and how the evidence of the past pointed to the possibility of increased yields per acre in Canada as a whole in the not distant future. It is now proposed to assemble what evidence there may be of the extent of land unoccupied in Canada, with a view especially of showing what areas are available for the growth of wheat.

Proportion of Total Area Under Cultivation.

In the first place let us examine into the proportion of the vast Canadian demesne that is at present either occupied or cultivated. The total area of Canada is 3,729,665 square miles, of which 3,603,910 square miles are land and 125,755 square miles are water. The land mileage represents an acreage of 2,306,502,400. Of this vast area, only 109,948,988 acres were returned as in occupation as farm land at the census of 1911; so that less than 5 per cent of the land area of Canada is as yet occupied for agricultural purposes. From the total land acreage above named we may deduct the whole of the vast areas in the Northwest and Yukon territories, for no question of their agricultural development is likely to arise before the uncultivated lands now within the boundaries of the nine provinces have been completely surveyed and thrown open to settlement. These territories comprise a land area of 905,186,000 acres (Northwest Territories 773,073,000 acres, and the Yukon Territory 132,113,000 acres); so that the total land area within the present provincial boundaries is 1,401,316,400 acres. The first table given in the introduction to the Report on the Agricultural Census of 1911 showed for each province the total land area, the acreage and percentage of the total that was in occupation as farm land at the date of the census, and the acreage and percentage of the total estimated to be possible of cultivation as farm land in the future. The estimates of land capable of future occupation were based partly upon the amount of farm land occupied at the date of census in 1911, and partly upon a percentage of the total area, fixed arbitrarily, but having reference to the more or less definitely ascertained facts as to the character of the lands in each province and the increases both in land occupied as farms and of the area of improved land. Since the census of 1911 was taken, large areas have been added to the provinces of Manitoba, Ontario and Quebec under the Boundary Extension Act, passed by the Dominion Parliament in 1912, and consequently the data in the census table have been altered, and in its revised form the statement stands as follows:

Total Land, Areas Occupied as Farm Land in 1911, and Estimate of Possible Farm Land in Canada.					
Provinces.	Total land. Acres.	Occupied as farm land, 1911.		Estimate of possible farm land.	
		Acres.	p.c.	p.c.	Acres.
Prince Edward Island	1,397,991	1,202,354	86.01	90	1,253,000
Nova Scotia	13,483,671	5,260,455	38.01	60	8,090,000
New Brunswick	17,863,266	4,537,999	25.44	60	10,718,000
Quebec	442,153,287	15,613,267	3.53	10	44,215,000
Ontario	234,163,030	22,171,785	9.47	25	58,541,000
Manitoba	148,432,698	12,228,233	8.24	50	74,216,000
Saskatchewan	155,764,100	28,642,985	18.39	60	93,459,000
Alberta	161,872,000	17,751,899	10.96	65	105,217,000
British Columbia	226,186,370	2,540,011	1.12	20	45,237,000
Total	1,401,316,413	109,948,988	7.84	31	440,951,000

This table shows that of the total land area within the provinces only about 8 per cent, or nearly 110 million acres, were under cultivation. The estimate of possible farm land is 31 per cent of the total, or 440,951,000 acres. This is a very moderate proportion, and it does not take into account forests and swamp lands, which may ultimately be tilled, nor does it include northern areas within the provinces the agricultural possibilities of which are at present unknown, because the lands are unexplored and unsurveyed.

Areas Available for Immediate Settlement.

Thus far we have looked at the matter from the standpoint of acres alone, without regard to exploration, surveys, railway development or accessi-

bility to markets. It will be well, therefore, to ascertain as far as possible what areas in each province are more or less immediately available for agricultural settlements. The public lands of Canada come under two categories, viz., those belonging to the Dominion Government and those under the control of the Provincial Governments. The Dominion lands are situated all within the three Northwest Provinces, and in what is known as the Railway Belt of British Columbia. The provincial public lands comprise those of the Maritime provinces, of Quebec, of Ontario, and of British Columbia (excepting those of the Dominion Government).

Dominion Public Lands.

Taking first the Dominion lands in Manitoba, Saskatchewan and Alberta, the records of the Department of the Interior show that up to January 1, 1915, the total number of acres surveyed was 195,341,726. Of this area, 133,157,726 acres have been alienated from the Crown, leaving 62,184,000 acres for disposal. Of this area 4,099,000 acres were under timber licenses, 4,394,500 acres were under grazing leases, 25,615,500 acres were under forest reserves and parks, and 28,075,000 acres were available for homestead entry. In addition to the surveyed area there are large tracts of land in the northern parts of the three provinces, which have as yet been explored only in a very partial way. The total area of this unsurveyed track is 290,300,972 acres, of which over 23 million acres are water-covered. No estimate of the area in this tract that may be suitable for agriculture can yet be made with any degree of accuracy.

Provincial Public Lands.

The same can be said, probably, of the Crown lands of the Provincial Governments, especially as regards the two large provinces of Ontario and Quebec. These, since the enlargement of their boundaries in 1912, contain vast areas of land the agricultural possibilities of which are at present quite unknown. The new district of Patricia in Ontario and the Ungava territory in Quebec are both outside the range of present calculations so far as agriculture is concerned.

Nevertheless it is possible to form some idea of the extent of the Provincial Crown lands which are available for agriculture. All the land in Prince Edward Island is settled. In Nova Scotia the area of the Crown lands exceeds 900,000 acres, and grants of 150 acres each for agricultural or grazing purposes may be obtained at the rate of \$1 per acre. Most of the land is, however, suitable only for forestry or mining, and no estimate is available of the extent of the areas suitable for agriculture.

In New Brunswick the Crown lands extend to about 7½ million acres, a survey of which has been

and those in Beauce between 50,000 and 60,000 acres.

Of the Province of Ontario, as enlarged by the Extension of Boundaries Act, 1912, it is difficult to realize the dimensions, and still more difficult to compute the extent of land capable of agricultural development. The Province includes, however, 230 million acres of land, of which only 13½ million acres are under cultivation. More than 20 million acres of the very finest arable land await the plough. Ontario is stated to be 3½ times the size of the British Isles, and 1½ times as large as the State of Texas. From east to west its borders are 1,000 miles apart, and the distance from north to south is 1,075 miles. The vacant public lands of British Columbia are approximately 200 million acres; but up to the present only about 90 million acres have been placed in reserve for settlement by pre-emption. In this area surveys are being made from year to year by the Provincial Government; and at the close of the year 1915 there were vacant and available 2,400,000 acres which had been surveyed for settlement.

Total Areas Available.

Leaving out of account the huge unsurveyed areas of Canada, such as the northern part of Quebec, including Ungava, of Ontario, including Patricia, of the Northwest Provinces, and of British Columbia, we get the following rough approximation of the areas which are available for immediate settlement and devotion to agriculture:

Public Lands of	Acres.
Dominion	28,075,000
Provinces:—	
New Brunswick	2,400,000
Quebec	7,000,000
Ontario	20,000,000
British Columbia	2,400,000
Total	59,875,000

There are therefore nearly 60 million acres of land which can be allotted to settlers either by sale at nominal prices or by free grant.

Cultivation of Unimproved Areas.

But there is another direction in which expansion is possible, and that is in the cultivation of the unimproved areas of farm lands in occupation. According to the last census the total area of occupied farm lands in Canada was 109,948,988 acres, of which 48,733,823 acres were improved and 61,215,165 acres were unimproved. Consequently we may count that there are approximately 120 million acres of land in Canada capable of devotion to agriculture as fast as the necessary increase of population can be secured.

Probabilities of Wheat Cultivation in the Immediate Future.

In considering this question a number of different factors must be taken into account. Last year represented probably the most that Canada could do in the matter of wheat cultivation under the exceptionally favourable circumstances which then prevailed. One cannot anticipate a large immediate expansion of the wheat acreage when the flower of the Canadian manhood is fighting in the Imperial cause on the battlefields of France and Belgium, and for the same cause the stream of immigration which was flowing so strongly into Canada up to the year 1914 has now all but stopped. When the war is over it will be reasonable to expect a resumption of Canadian immigration on a large scale. The continuance of high prices for agricultural produce, and especially for wheat is probable, and should attract large numbers to the land. The general conditions in Canada point to the absolute necessity for greater agricultural production and increased exports for the restoration and preservation of a sound economic equilibrium. With regard, however, to the production of wheat, Canada will probably have serious competitors. After the conclusion of the war the agricultural development of the Russian Empire will proceed with accelerated pace, both in Europe and Asia, and there is room in various other countries for considerable expansion in the growth of wheat. It is important, therefore, that in Canada undue dependence should not be placed upon wheat growing, and as the demand for meat is good and the prices for it are high, greater benefit will ensue whenever simultaneous attention can be given to the production of grain and live stock than where grain only is cultivated.

During the ante-bellum period, from the beginning of the century to 1914, when the total immigra-

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