

AGRICULTURE AND THE CANADIAN ECONOMY

AGRICULTURE AND THE CANADIAN ECONOMY

by

Wells R. McTaggart.

A Thesis

submitted for the Degree of Bachelor of Arts

in

Honour Political Economy.

McMaster University,
Hamilton, Ont.
May, 1950.

PREFACE

If readers derive half as much pleasure from reading this thesis as I have had in writing it, then it is possessive of some worth in spite of its superficial treatment of agriculture and the Canadian economy. Time, space and training have placed a severe limitation on the treatment of a topic, which, if adequately developed, would encompass a goodly portion of the economic history of Canada and contemporary aspects and problems of the Canadian economy.

In this thesis I have little more than traced in outline form the place of agriculture in the economy with the aim of providing a background to some of the long run problems of the Canadian economy posed by agriculture in order to suggest an agricultural policy which, in my humble opinion, could prove corrective of the fundamental maladjustments responsible for these problems.

My thanks to Dr. R.C. McIvor for his patient supervision and expert guidance; to Miss Laura Freeman for her courteous assistance in the pursuit of periodicals and public documents; and to Miss Dorothy Tomlinson for her cheerful perseverance in putting this manuscript into readable form.

W.R.M.

Edwards Hall,
McMaster University,
April 1950.

TABLE OF CONTENTS

	<u>Page</u>
Preface - - - - -	ii
List of Tables - - - - -	iv
<u>Chapter</u>	
I. CANADIAN AGRICULTURE: INTRODUCTION - - - - -	1
II. PRAIRIE AGRICULTURE PRIOR TO CONFEDERATION - - - - -	9
III. PRAIRIE AGRICULTURE: INTRODUCTION - - - - -	26
IV. THE GROWTH OF THE WHEAT ECONOMY - - - - -	46
V. PROBLEMS OF THE WHEAT ECONOMY - - - - -	60
VI. GENERAL ASPECTS OF CANADIAN AGRICULTURE PRIOR TO WORLD WAR II	73
VII. CANADIAN AGRICULTURE: WORLD WAR II AND THE POST-WAR PERIOD	90
VIII. CONCLUSION - - - - -	100
BIBLIOGRAPHY - - - - -	107

TABLES

<u>Table</u>		<u>Page</u>
I	Production Of Wheat In Manitoba	48
II	Proportion Of Land To Labour In The Prairie Provinces 1910-1931	52
III	Acreage, Production, Exports, And Carry-Over Of Wheat 1922-1940	65
IV	Total Value Of The Dairy Production of Canada 1930-1938	88
V	Total Value Of Farm Products	89
VI	Average Gross Value Of Products Per Farm	89
VII	Acreage Of Specified Field Crops In The Prairie Provinces, 1939-1944	91
VIII	Cash Income From The Sale Of Farm Products In The Prairie Provinces	92
IX	Agricultural Subsidies Paid By The Dominion Government	95

Chapter 1 - CANADIAN AGRICULTURE: INTRODUCTION

In any primitive society, agriculture of necessity is the foundation of its existence and means of survival. The intricacies of contemporary economies make it difficult to ascertain the dependence of a modern nation upon agriculture. An acceptable standard of living to-day presupposes the consumption of a vast number of goods of non-agricultural origin. An attempt will be made to examine the place of Agriculture in the Canadian economy during its development as a means of determining the role played by it in facilitating an "acceptable" standard of living.

Canadian agriculture had its birth as a child of mercantilism. The great colonizing nations, Britain and France, concerned with the "favourable balance of trade" - more exports than imports - implanted their colonies with settlers as potential consumers of their exports and producers of those essential materials not found in the homeland. It is one of the many paradoxes of the story of Canada that the earliest means of successfully promoting Canadian agriculture, in the form of the Seigniorial system, served later to act as its most repressive feature. The system first made its appearance in 1626 in the form of a seigniorial grant to one Louis Hebert in order to encourage those who may hereafter desire to inhabit and develop the said country of Canada...to have and to hold in fief noble forever.¹

For over a century after the French came to the St. Lawrence all the Seigneuries were situated directly on the shores of the river to take advantage of the waterway. The first roads skirted the river and this placed a greater premium on the roads contiguous to it. By the terms of the Custom of Paris, which was the common law of the colony, all the children of a habitants family, male and female, inherited equal shares of his lands.

¹ W.B. Munroe, The Seigneurs Of Old Canada (Toronto: Brooke and Company, 1920), p.90.

With large families the rule this resulted in shredding the land into ribbons so that each child could retain river frontage. The system militated against crop rotation and in many ways militated against progress.¹

An engineer, Gedeon de Catalogne preparing a report for the French home authorities in 1712 showed that practically all the lands bordering on both sides of the St. Lawrence from Montreal to some distance below Quebec had been made into Seigneuries.²

The continuance of the Seignorial system under British rule continued repressive to the development of Agriculture. The application of British law removed the paternal nature of the system which had been one of its few advantages. A writer had this to say of the system in 1839:³

The lands in the District of Montreal are I believe, generally of good quality...but, from about 60 miles above Quebec to the eastern boundary of the province they are worn so miserably low that I have known a habitant wait fifteen years for a crop sufficiently profitable to enable him to thatch his barn.

A further indication of the subsistence nature of the French Canadian Agriculture is evidenced by this excerpt from the Canadian Economist of August 8, 1846:⁴

Every habitant male or female is clad to this day more or less in the rude fabrics of their own manufacture - ...Why...? The answer is the same as has been given respecting agriculture - the want of education. Had the rural population been enlightened, they would have seen that instead of each family in a district having its loom...each district should have had its factory...

In spite of an "Act of the Abolition of Federal Rights and Duties in Lower Canada" in 1854, the system on the whole retained its form in practise and the habitants continued to pay their rents constituées on

¹ Ibid, pp. 91-94.

² Ibid, p. 65.

³ H. Taylor, "Considerations On The Past Present and Future Conditions of The Canadas" (Montreal: 1839), p. 19.

⁴ H.A. Innis and A.R.M. Lower (eds.), Select Documents In Canadian Economic History, 1783-1885 (Toronto: University of Toronto Press, 1933), p. 302.

St. Martins day.¹ Thus the agriculture of Old Quebec retained in large part its subsistence nature until long after the appearance of specialized production in other parts of Canada. For this reason it has never had an influential role in the Canadian economy as a whole.

Much of the early settlement of the Upper St. Lawrence and what later came to be known as Upper Canada was fostered by the British government in order to outnumber the French and, after the American revolution, to bolster the frontier. Isolated communities were established in the interests of defence, which magnified the transportation problems of a primitive economy. Agriculture of necessity was initially of a subsistence nature in these communities until improved transportation facilities could provide access to a market.

The following excerpt from the Montreal Gazette, March, 1833² is indicative of the condition prevailing in the Eastern Townships:

...owing to the great expense of getting produce to market, very little more is raised than is sufficient for home consumption. The opening of even a winter road was an era in the history of these townships...now however there was a way of getting to market at least once in the year.³

Wherever possible, maximum use was made of water transport available which led to the early improvement of the St. Lawrence waterway.

Until near the middle of the century timber was the major factor in Canadian trade. In 1834 nearly two thirds of the whole volume of exports from Canada to Great Britain consisted of lumber, amounting to £784,457.⁴ In many areas lumberers were the first settlers.⁵ In this respect, agriculture played an ancillary role as viewed in the economy as a whole. The Canadian Economist of June 6, 1846 reporting on lumbering and farming in the

¹ Munroe, op. cit., pp. 145-152.

² Innis & Lower, op. cit., pp. 32-33.

³ C. Day, Pioneers of the Eastern Townships (Montreal: John Lovell, 1869), p. 72.

⁴ Innis & Lower, op. cit., p. 274.

⁵ Ibid., p. 41.

Ottawa District would seem to give evidence of this:¹

The timber trade is likely to prove of permanent importance, from the inherent good qualities of the article produced; and it gives a market at the door of the farmer for a good portion of the more bulky part of his produce, - for his horses, cattle, hay, oats, beans, peas, potatoes, and a portion of his wheat.

A portion of Upper Canada Legislative Assembly debates appearing in the Montreal Gazette, February 17, 1831² indicates the esteem held for the lumber trade:

...the thousands of persons employed in that business consume vast quantities of the flour and pork sent from the western provinces...

John MacTaggart writing in Three Years In Canada (London:1829) said:

The lumbermen [who at that time were small entrepreneurs employing perhaps only their own family, or one or two men] is the person who does good to the country. He brings an article to market with much risk - the only staple commodity, in fact, that is; and consequently he is the means of bringing the greater portion of cash to Canada.

A further indication of the still subsidiary role of agriculture in the economy as a whole is this quote from the Kingston Herald, appearing in the Montreal Gazette, June 4, 1835:

Had they [the Legislative Assembly] confined their measure [colonial duties] to the imposition of a duty on American wheat and flour...for home consumption the plan would have received but little opposition... But when the proposed duty was extended to beef, pork, and mutton of which Canada does not raise half enough to supply its own wants... every principle of sound policy reflects such an absurd measure...

The foundation for the later prominent role of agriculture was being laid at this time. From the earliest settlements³ onward, wheat, because of its non perishable nature and natural adaptation to the climate became the chief crop of Canadian agriculture. Until improvements in transportation facilitated the marketing of more bulky meat and dairy products at less cost, wheat remained the chief cash crop. It had been exported in considerable quantities from Old Quebec before the conquest⁴ and before the unfavourable

¹ Ibid., p. 41.

² Ibid., p. 274.

³ Adam Shortt (ed.), Canada and its Provinces (23 vols., authors' edition, Toronto: Edinburgh University Press, 1914), V.7, p. 653.

⁴ Ibid., V.15, p. 54.

consequences of the "Custom of Paris" had appeared. It was the first agricultural product to be exported in quantity from the areas newly settled by the British and by 1793 exports amounted to the considerable quantity of 541,500 bushels.¹ This amount was not appreciably exceeded until 1840 and quite often was considerably less - 24,606 in 1796. However the market was being established as indicated by this excerpt from a Liverpool letter printed in the Montreal Gazette, April 15, 1830:²

The Upper Canada wheat that has come here by the late ships is beautiful and sales of it have been made as high as 10s 6d sterling 70 lbs which is higher by much than any other description of wheat will bring in our market.

The improvement in transportation resulting from construction of the Welland Canal was such that the repeal of the Corn Laws in 1840 resulted in the sudden predominance of wheat amongst Canadian exports. The first transit of produce passed through the Welland Canal in 1830³ and greatly eased the transportation problem of a great deal of the Niagara peninsula since it enabled the Thames and Grand rivers to become the main arteries of transport until the advent of railways.

The prosperous condition of agriculture in a few years fostered a minor railway boom which was to have major effects on the place of agriculture in the economy. Perhaps the most important event in early railroad history was the opening of the Great Western Railroad in 1853 connecting Niagara, Burlington Bay, London and Windsor. Scobies Almanack for 1854⁴ speaks of "...the sudden and unparalleled increase in population and wealth of the towns through or near where it [the G.W.R.] passes; the springing up of villages a few miles

¹ Innis & Lower, op. cit., p. 265.

² Ibid., p. 263.

³ Ibid., p. 169.

⁴ Norman Thompson and Major J.H. Edgar, Canadian Railway Development From Earlier Times (Toronto: MacMillan Company of Canada Limited, 1933), p. 42.

apart throughout its length; and the doubling and even trebling in value of farming lands within five or ten miles of its course..."

The presence of a cash crop (wheat) was instrumental in encouraging the development of railways during this period which in turn induced more rapid settlement and the rapid increase in the place of agriculture in the economy of Canada as a whole.

Agriculture in the Maritimes up to 1850, except in Prince Edward Island was not on an export basis. It was chiefly self sufficing, or ancillary to lumber, fishing, and shipbuilding. Shipbuilding was the major industry until the advent of Steamships.¹

Except in the vicinity of the Hudson's Bay Company's trading posts agriculture in British Columbia was non existent until the last quarter of the 19th century.²

Improvements in transportation after 1850 were highly beneficial to agriculture along the St. Lawrence but it seems that the main stimuli for these improvements during the middle of the century were outside the field of agriculture in the lumber and timber trade and commercial potentialities of the St. Lawrence occassioned by the phenomenol development of the American west.

The unfortunate canalization of the St. Lawrence during the transition of shipping from sail to steam rendered the then prodigious undertaking obsolete even before completion. The Grand Trunk Railway was designed to supplement the canals. Allan McNab, chairman of one of the first standing committees on railways and telegraph lines in 1851 stated:³

¹ S.A. Saunders, The Economic History of the Maritime Provinces (Ottawa: a study prepared for the Royal Commission on dominion-provincial relations, 1939), p. 2.

² Shortt, op. cit., V.22, p. 527.

³ Innis & Lower, op. cit., p. 487.

...your committee have come to the conclusion that the interests of the province will be best consulted by the construction of a grand Trunk Line of Railway extending from Quebec to Windsor on the river Detroit. This great line ... in conjunction with our magnificent chain of water communication [will] secure for Canada a large portion of the Trade and Commerce of Western America...

The early development of railways, though in part incidental to agriculture was instrumental in a rapidly expanding frontier which placed agriculture at the middle of the century on the threshold of becoming the most important part of the Canadian economy for the first time. By 1850 wheat formed a substantial portion of Canadian exports. This was the combined effect of improvements in transportation, a great influx of settlement, and the European demand for wheat which made it a comparatively lucrative cash crop.

During this period infant industry appeared, first as the child of transportation and gradually as the foster child of agriculture. The Canadian Economist, August 8, 1846 reported:¹

We enumerate a few of the leading arts in which we have already made some progress:
...there are four Foundries in Montreal, capable of producing steam engines of the largest dimensions...In addition may be enumerated the following crafts, viz: Cabinet Makers, Tailors, Carpenters, Tinsmiths, Blacksmiths, Housebuilders, Stonecutters, Nailmakers, Buck makers, Carriage makers, Soap and Candle makers...There is a cotton mill in full operation at Chambly...another at Sherbrooke...a glass factory at St. Johns.

A large part of these activities would be incidental to a growing population facilitated by an expanding agricultural frontier. A writer reported in 1853 that:²

During the last two or three years, manufacturers of farmer's tools and implements have been established in all the principal towns and cities in Upper Canada. So great is the demand for improved machinery that even American manufacturers have set up branch establishments in Canada, with very profitable results.

The period of the reciprocity treaty (1854-1866) resulted in a

¹ Ibid., p. 302.

² Ibid., p. 541.

diversification of agricultural produce. Improved transportation enabled the marketing of meat and dairy products. The natural inclination of north-south trade resulted in considerable intercourse even before the treaty as evidenced by this quote in the Montreal Gazette, July 20, 1839:¹

They [the Americans] have a very useful mixture of woollen and cotton, called satinette...and great quantities are sent across the line into Canada...The iron tools of America have completely superseded Birmingham and Sheffield goods...States' tools are universally preferred at a great difference in price...

Similarly the Quebec Gazette, June 11, 1835 reported:²

United States traders have this year come into Canada, bought up wheat, flour, provisions and lumber, and paid heavy duties on their transport out of this country...

The complete collapse of the colonial system marked by the repeal of the Corn Laws in 1849 swept away any artificial advantage that the St. Lawrence as a communication system had been able to retain.³ The American west, until the Civil War,⁴ proved a formidable competitor on the British grain market and Canadian agriculture ceased to be characterized by specialization in wheat.⁵

During reciprocity the free flow of forest products in response to the heavy demands of American westward expansion resulted in the stripping of vast areas which in part were suitable for settlement.⁶ This together with the influx of settlement and improved transport allowed the Canadian grain trade to regain its place in the European market during the American civil war. The ready market provided by the expanded lumber industry was a further inducement to the diversification of product which was soon to become a permanent feature of agriculture east of the Great Lakes.

¹ Innis & Lower, op. cit., p. 247.

² Ibid., p. 251.

³ D.G. Creighton, The Commercial Empire of the St. Lawrence (Toronto: The Ryerson Press, 1937), p. 350.

⁴ D.A. MacGibbon, The Canadian Grain Trade (Toronto: The Macmillan Company of Canada Limited, 1932) p. 20.

⁵ Innis & Lower, op. cit., p. 550.

⁶ A.R.M. Lower, The North American Assault on the Canadian Forest (Toronto: The Ryerson Press, 1938), pp. 16-27.

Chapter II - CANADIAN AGRICULTURE PRIOR TO CONFEDERATION

Up to the time of reciprocity the main cash crop was wheat which supported a fairly extensive superstructure in the form of handling facilities and other services. This growing dependence of the economy on a single cash crop left it a prey, as it was to become in the twentieth century, to the whims of foreign markets.

There were various reasons for the continuance of a single crop. The cost of obtaining stock and the large profits to be made out of the wheat staple in a favourable year on a small investment was probably the greatest inducement. Except in lumber areas, where there was an extensive market for other agricultural products, wheat remained the only cash crop. The Colonial Trade Act of 1831 repealing duties on agricultural produce coming into Canada made it more difficult for Canadian farmers to compete with Americans in livestock and dairy products. Livestock raising offered few attractions even in the vicinity of urban communities like Toronto. The market at Montreal was supplied to a large extent from Vermont. Difficulties encountered are described by an immigrant settling somewhere near Lake Erie:¹

My cattle and sheep must be driven a great distance, and this very distance throws me into competition with the Americans from the prairies [of central Ohio, Indiana, and Illinois] who are constantly driving bullocks into the market of Toronto, and who could undersell me if I had my farm for nothing, merely because their grazing is unlimited and their pastures finer.

Owing to the fluctuating character of the grain trade and to the severe competition of American livestock in the Upper Canadian market, agricultural interests strove to have a protective tariff established against American produce. The question of a tariff aggravated the cleavage between agricultural interests and the commercial interests of the St. Lawrence who

¹ William Hutton of Belleville to his brother, June 25, 1834 in History of Agriculture in Ontario, 1613-1880 R.L. Jones, (Toronto: University of Toronto Press, 1946), p. 127.

favoured the free importation of agricultural produce in order to consolidate its position in the grain trade. The rebellion of 1837 was in a sense an agrarian revolt¹ and an indication that agriculture had assumed a position in the economy where its voice must be heard.

European demands after the Napoleonic wars kept the price of wheat and flour high in Canada until 1820. Under the new Corn Law of 1851 the colonies in North America enjoyed an advantage over their foreign competitors. In addition crops on the continent between 1814 and 1820 were deficient, during which period the Canadian grain trade prospered. In 1820 an excellent harvest in Britain caused prices to drop to the point where the provisions of the Corn Laws excluded imports of wheat. The consequence in Canada was a decline of from 300 to 400 per cent in the price level since the boom days of the war.² This sequence of events, following a sudden change in the overseas demand for the single staple of Canadian agriculture, was to be repeated many times.

A reduction in duties under the Corn Law of 1828 plus the expansion of local markets occasioned by the flood of immigrants eased the situation and encouraged further expansion of the wheat acreage. However the four years ending in 1835 saw extraordinary production of wheat in Britain and again Upper Canadian wheat and flour were only occasionally admitted to the British market.³ A select committee of the Assembly of Upper Canada reported that, in the winter of 1834-35 the prices paid for wheat had fallen to a range of from 32 to 38 cents per bushel. As it was estimated to cost between 40 and 50 cents to produce a bushel of wheat in the country adjacent to Lake Ontario it was manifest that wheat growers there, and even more so to the west

¹ D.G. Creighton, "Economic Background of the Rebellions," Canadian Journal of Economics and Political Science, V. 3, (1937), p. 322.

² R.L. Jones, History of Agriculture In Ontario 1613-1880, p. 39.

³ Jones, op. cit., p. 122

were actually operating at a loss.¹

Wheat was not again exported in quantity until 1840. The Canada Corn Act of 1842 placed Canadian wheat and flour at a decided advantage on the British market and between 1840 and 1850 increased production was estimated at 400%. The Toronto Board Of Trade reported in 1845 that "at no former period in the history of Western Canada has the condition of the agricultural class been so prosperous as at this time."² The repeal of the Corn Laws in 1846 re-emphasized the weakness of an economy based on one or a few staples catering to a capricious market.

The Crimean War 1853-56 created an additional demand for foodstuffs and prices rose again to encourage further expansion of the wheat acreage. The post war slump in prices from nine shillings to four shillings and six pence per bushel wrought its usual consequence in the Canadian economy, soon to be alleviated by the combined effects of reciprocity and the American Civil war, when the wheat acreage was again encouraged to expand.

During the eighteen fifties Montreal and the St. Lawrence system steadily lost ground to the Erie Canal and New York in the competition for the grain of the Great Lakes region. The decline was relative and Montreal did experience an absolute increase in the amount of grain exported, but in the five years from 1855 to 1859, the shipments of grain and flour by way of Buffalo and Oswego were, about twenty times those by way of Montreal.³

The outbreak of the American civil war gave a decided impetus to the transit grain trade, partly because of the closing of the Mississippi. More grain, it was reported, reached Montreal in 1861 and 1862, than in all

¹ Ibid., p. 137.

² Toronto Examiner, January 7, 1846, in Jones, op. cit., p. 137

³ Jones, op. cit., pp. 231, 232.

the previous years since the opening of the canals.¹ The expansion of the trade through the St. Lawrence was facilitated by improvements in the methods of handling grain. By the early eighteen sixties steamers were plying between Lake Michigan ports and Sarnia or Collingwood, and transferring their cargo at these points to the railroads, which transported them to Lake Ontario sailing vessels. Larger upper-lake boats could not pass through the Welland canal, so their cargoes were unloaded at Port Colborne, taken by rail across the Niagara peninsula, transhipped at Port Dalhousie for Kingston, and again at Kingston for Montreal. At Kingston as early as 1856, there was at least one floating elevator, capable of unloading 3,000 bushels an hour from the lake boats into St. Lawrence or Oswego canal barges. In the late eighteen seventies Kingston had five floating elevators, together capable of transferring 250,000 bushels in twelve hours; and Montreal had seven elevators for transferring grain from the Kingston barges, four for emptying railway cars, and twelve floating ones in the harbour.²

One of the striking results of railway construction was the rise of Toronto as a primary grain market - a place for the large-scale collection of grain and flour for shipment to domestic markets for home consumption, or to the seaboard for export. The rapid growth of the Toronto grain trade was thus described in 1856:³

Toronto is becoming a very important wheat market. Enjoying an excellent geographical position within a few hour's sail of the south shore of the lake, where there are numerous mills and a good market, as at Rochester, Wilson, Oswego, Ogdensburg, in the midst of a most fertile country, into which now radiate railways, East, West, North, and Northwest, with abundant facilities for purchase storage and shipment, and possessing men of business, energy, and tact we believe that Toronto is speedily becoming the leading market in the Provinces. The receipts for the past two months are

¹ Hind; Eighty Years Of Progress, p. 183 in Jones, op. cit., p. 232.

² Jones, op. cit., p. 234.

³ Canadian Agriculturist, October 1856, p. 288 in Jones, op. cit., p. 235.

275,000 bushels per week; of this about 35,000 bushels in each week have been purchased on the market, while a great deal of it has been sold by country dealers to our wholesale buyers, in lots of 1,000 bushels and upwards...

The period 1825-50 saw the development of agriculture as the source of vitality in the Canadian economy. The volume of settlement and the appearance and expansion of an export staple into proportions capable of endowing it with commercial potentialities made expansion in agriculture necessary for a continued vitality in the Canadian economy. The failure of the St. Lawrence canal system turned the attention of commercial interests to agriculture. Their hope that agricultural expansion in Canada would allow the St. Lawrence canal system to become a profitable enterprise was doomed to disappointment by the facts of geography. The most formidable fact was the Canadian shield or Laurentian barrier. This vast region of lakes, rocks, and forest, which occupies all but a few thousand square miles of eastern Canada interposes the most formidable of barriers between the usable regions of the East and the fertile areas of the West. By about 1850 most of the available farm lands in the St. Lawrence Valley proper were in private hands, and the bold outlines of the Barrier were revealing themselves.

In the first annual report of the Commissioner of Crown Lands 1856, it is admitted that the more desirable lands are gone; what remains to the crown are the "lumbering countries". The commissioner describes the frontier of settlement as running from Gaspé in the east along to the northward of Quebec city, bending up the Ottawa towards Pembroke and then southward again in the direction of Brockville, thence sweeping around to the northward and westward to emerge on Georgian Bay at the mouth of the Severn. This frontier is closely coincident, with what we now know to be the line of the barrier.¹

¹ A.R.M. Lower, "The Assault On The Laurentian Barrier," Canadian Historical Review, V.10 (1929), p. 300.

The limits of land settlement which seriously handicapped agriculture in its new role as the chief stimulus in the economy was reinforced by the opening of the American West which offered more and greater attractions immigrants. In 1857 out of 72,251 immigrants entering Canada, 37,034 went to the United States.¹ Competition from the United States with its cheaper lands and large markets was a serious reality as early as the thirties and forties. The section of the Land Act of 1841 providing for free land grants of fifty acres was an attempt to meet this competition, and the Public Lands Act of 1853 raised the ante to 100 acres.

The attempt to settle the Ottawa-Huron tract - that portion of the Laurentian Shield bordered on the east by eastern Ontario and on the south by a line running from Kingston to the southeastern corner of Georgian Bay which in large part is now contained by the Algonquin Park Reserve - was the last hope for the continuance of expansion of Canadian agriculture east of the Great Lakes. Its inability to compete with the American west, especially after the American Homestead Act of 1862, and to retain most settlers who did stop there, brought home the realization that the agricultural frontier no longer existed.

This regrettable state of affairs was not improved by the increasing inability of the main and crucial staple to compete with the American west. Evidences of soil exhaustion were becoming more numerous.

Because wheat continued to be the only cash crop the object of the

¹ Paul W. Gates, "Immigration In The Province of Canada", Canadian Historical Review, V. 15 (1934), p. 27.

ordinary Upper Canadian farmer had been to produce as much wheat as possible. They exhibited a wide variation in the methods they followed. At one extreme were those who practised wheat "skinning" or "mining" - a method of cultivation which had exhausted the soil of certain parts of Upper Canada as early as 1820.¹ This was partly the result of the circumstance that when land was cheap and labour dear, "poor" farming was the most profitable kind.²

E.W. Thompson, president of the Agricultural Association of Upper Canada said in 1847.³

It is mortifying to hear remarked by those lately arrived from Great Britain where the land is cultivated in a very superior manner, that some parts of Canada look as if the people had farmed themselves out. Yet mortifying as it is these are the remarks we are compelled to listen to, and cannot contradict. Facts are stubborn things, for in many parts of Canada such an exhausting course of culture has been pursued, without adding what was necessary to retain the productive powers of the soil, that it has become so reduced, and the yield consequently so small, as to scarcely adequately remunerate the cultivator for the expense of harvesting, leaving him minus all the other expenses as well as interest on his capital.

Three years later his successor, J. B. Marks, added a postscript: "The farms along the whole line in the old settled Townships from Montreal to Hamilton, and round the banks of the lakes, rivers and bays, for a space of eight or nine hundred miles, with few exceptions, are what is in Canada termed, worn out."⁴

This situation was seriously complicated by the ravages of the wheat midge which made its appearance in Lower Canada in 1829 and soon marked

¹ John Howison, Sketches Of Upper Canada (Edinburgh: Oliver and Boyd, 1825), p. 146.

² Jones, op. cit., p. 90.

³ Ibid., p. 196.

⁴ Ibid., p. 196.

the ruination of wheat farming there.¹ The midge travelled up the St. Lawrence at an estimated speed of ten or twelve miles a year. It had been prevalent around Montreal shortly before the Rebellion of 1837. It reached Cornwall before 1840, Brockville about 1842, the Bay of Quinte in 1849. As it spread inland to the outermost settlements, farmers in one St. Lawrence county after another had to abandon wheat as a staple. In 1856 the midge crossed from the United States along both the Niagara and Detroit rivers, and caused such havoc in the countries from Toronto to the Detroit River that the estimated loss to the farmers was \$2,500,000.² Increasing numbers were forced to abandon wheat as unprofitable, and it was remarked with truth in the Canadian Agriculturist in 1859 that on account of the midge, Canada West was "in a fair way to go out of wheat growing."³ A midge proof wheat was discovered, but it was of inferior milling quality⁴ and did not appreciably alleviate this added disadvantage with which the Canadian grain trade had to contend.

Until 1850, exports to the United States were predominantly of timber and cereals or flour which could be conveniently shipped by water, and of horses and cattle, which could be driven. For other products farmers had been dependent for a market on the flow of immigration, the work camps associated with the building of the St. Lawrence canals, and, in the Ottawa valley, the timber trade. The approach of American railways to the frontier in the period immediately after 1850 gave an outlet for all products to the market provided by mushrooming population centres such as Chicago and New York.⁵

¹ Ibid., p. 137.

² Ibid., p. 203.

³ Ibid., p. 204.

⁴ Canada Farmer, November 1, 1866, p. 328. in Ibid., p. 246.

⁵ Ibid., p. 180.

The importance of the export trade evolved not out of actual quantities exported, but out of the fact that the price of the surplus the farmers were able to dispose of outside the province had a remarkable influence on prices, and consequently production, at home.¹ A report on the state of agriculture in the County of Prince Edward, 1854 states:²

It was of comparatively little profit to rear fine animals, when there was no demand for beef, mutton, butter, or cheese; consequently the farmer could only depend upon the cereal productions of his land... The increased demand for beef, mutton, wool, butter, and cheese, as also the demand for livestock, to supply the American market, is causing, with good reason, much more attention to be paid to rearing good stock, and to the best and most economical mode of feeding them through the winter.

The first American railway of importance to Upper Canadian agriculture was the Ogdensburg railway, which opened in 1850 and connected the town of that name with Boston and New York.³ The benefits to that part of Canada West convenient to the railway were thus summarized in 1852:⁴

The farmers have obtained better prices in New England, than could be had in Old England or her provinces. They have found a ready market for all kinds of coarse grains, cattle, sheep, beef, mutton, pork, butter, cheese, and even potatoes poultry and eggs. Purchasers from the east are continually in Canada, and the farmers have a market at their own doors. Every depot on the Ogdensburg road is a Boston market.

Other American railroads soon created a similar demand along the entire border of Upper Canada. Perhaps the real importance of this development was that it allowed the products of the mixed farming necessitated by soil exhaustion in the older counties to become the source of a cash income. In

¹ Ibid., p. 185.

² Ibid., p. 186.

³ Ibid., p. 180.

⁴ Playfair, Remarks on Mr. Justice Brown's Report To the Committee appointed to Promote the St. Lawrence and Lake Huron Railroad, p. 9 in Ibid., p. 181.

many areas the midge and soil exhaustion had made wheat farming impractical even with favourable prices. However, as long as the price of wheat continued to enable a return from a small investment, the newer areas continued to specialize in wheat until the exigencies of soil exhaustion necessitated recourse to the more reliable mode of mixed farming as a means of securing a livelihood from the soil. During reciprocity, 1854-1864, the demands of the American market allowed this recourse to mixed farming to supplement the cash income of farmers and thus the prosperity of the economy. The loss of the American market after the abrogation of reciprocity and the continued decrease in the comparative advantage of the grain trade led to a period of stagnation in Canadian agriculture and the economy until the opening of the western prairies once again allowed agriculture to be the source of vitality through the medium of the wheat staple.

In the ten years preceding Confederation thirteen committees reported to the assembly of the province of Canada on various aspects of immigration and colonization, but only when they mentioned the agricultural possibilities of the west does one sense a glimmer of hope in their deliberations.¹

Exports of forest products continued to hold a prominent place in Canadian trade comprising 48.2% in 1853.²

There seems to have been some difference of opinion as to the favourable effects of uncontrolled large scale American exploitation of Canadian forests resulting from reciprocity. A lumberman, James Little, had this to

¹ V.C. Fowke, "An Introduction to Canadian Agricultural History", Canadian Journal of Economics and Political Science, V.8 (1942), p. 61.

² Saunders, op. cit., p. 112.

say in 1862;¹

...Canada lost millions by that treaty. It stimulated production amongst us to such an extent...the raw material which would now be worth millions of dollars, were it standing in the forests, never returned a farthing to the operators, or to the country; and not only so, but the cost of a great deal of labour expended in manufacturing it went to add to the wealth of our neighbours across the line...

Wages paid out by the industry remained to go into land clearing and homebuilding, and the industry provided a market for agricultural produce, but it was the first striking instance of the difficulty Canada was to experience in deriving a greater share of the value of her abundance of raw materials.

The obvious means of meeting this problem was the development of secondary and tertiary industry insofar as it was possible, which at the same time would provide a market for agricultural produce.

By 1850 the trend toward the development of secondary industries was considerable. Large scale industry had not then developed as a serious threat to small scale local industry. The heavy immigration of British artisans, as well as agriculturists, who had no liking for throwing away the benefits of their years of apprenticeship and who stood doggedly by their trades provided a ready pool of labour for the development of local industries.²

The first iron and steel industries were associated with transportation, in the manufacture of railway equipment. In 1858 Hamilton boasted of locomotive works, foundries, cars, and machine shops. The location of the Grand Trunk Railway's repair shops in Montreal provided employment for some 3,000 men. In 1886, the Historical Review of Montreal reported that "the estimated number of the population of Montreal dependent for wages on the Grand Trunk Railway

¹ A.R.M. Lower, The North American Assault on the Canadian Forest, pp. 146-147.

² H.A. Logan, History of Trade Union Organization In Canada (Chicago, Ill: The University of Chicago Press, 1928), pp. 66, 67.

is about 14,000 persons."¹

In 1858, sixty-two manufacturers, merchants, and newspapermen met in St. Lawrence Hall, Toronto, "for the purpose of recommending such a readjustment of the tariff as would place the manufacturers of Canada on a footing of greater equality with those of the United States."² The meeting reflected the new forces of industrial capitalism which accompanied the railway building of the fifties, as well as the encroachment of (American) corporate industry on enterprises of a more local nature. Manufacturers were present from Toronto, Montreal, Hamilton, Kingston, Belleville, Port Hope, London, Ottawa, Dundas, Georgetown, Newcastle, Lyn, Galt, Ganonoque, Caledonia, Colbourne, Merrickville, Niagara, Castleton, and Oshawa, and indicates the general trend toward development of secondary industry. A large number of the delegates were iron and brass founders. The remainder included tanners, cabinet-makers, carriage-makers, printers, manufacturers of furniture and picture frames, soap boilers, flour millers, furriers, cloth manufactures, wholesale and retail merchants, and newspapermen which indicates the presence of the nuclei of industries of diversified products.

Reciprocity saw the development of secondary industries which processed agricultural products. The high prices for cheese which prevailed during the civil war tempted many farmers in Upper Canada into dairying. There was a large domestic market already in existence, as was shown by the importations of Ohio and New York cheese, and a potential one in the British Isles which American cheese men were already entering. All that was necessary for the development of cheese making on a large scale was the introduction of the factory system.³ Early in 1867 it was remarked that

¹ L.G. Reynolds, The British Immigrant (Toronto: Oxford University Press, 1935), p. 92.

² The Globe, Toronto, April 15, 1858 in Clark., The Canadian Manufacturers' Association (Toronto: University of Toronto Press, 1939), p. 2.

³ Canada Farmer, March 1, 1864, p. 53 in Ibid., p. 255.

"cheese factories are now springing up in nearly every section of the country so rapidly that it is difficult to keep track of all the new institutions."¹

Reciprocity saw also the development of the pork packing industry. Packing houses were established at Toronto about 1855, and a little later at Hamilton and Montreal. By 1865 several packers were using about 50,000 hogs each year, importing most of their supply from Chicago as the local supply was not adequate. Because the industry catered to the British market while the home market continued to import from the United States, it was not instrumental in greatly stimulating production of hogs in Canada at this time. Flour milling had reached considerable proportions in 1851, there being, according to the census of that year 1,153 grist mills (692 in Ontario). The industry benefited also by reciprocity in being allowed to cater freely to the markets provided by the growing manufacturing and population centres of the United States.

The introduction of labor-saving machines in agriculture was another stimulus to the development of manufacturing, and was greatly hastened by the shortage of farm labourers during the railway boom of the fifties. In 1854 farmers in counties such as Simcoe were beginning to buy reapers on account of the high wages demanded by harvesters, and in 1855 a large proportion of the crop not only in such old counties as Ontario and Norfolk, but even in new ones such as Huron was cut by the reaper.² "The demand for implements in this vicinity," asserted a Toronto editor in 1855, "and so far as we can learn, throughout Upper Canada has more than doubled within the last year."³ Other kinds of labour-saving machinery likewise came to be more extensively employed in the eighteen-fifties than before. By 1855

¹ Canada Farmer, May 15, 1867, p. 150, in Ibid., p. 255.

² Jones, op. cit., p. 199.

³ Canadian Agriculturist, June 1855, p. 181, in Jones, op. cit., p. 200.

heavy cultivators, had become fairly common. Seed drills, by this time much resembling modern seeders, were no longer rarities. Gang ploughs and hay-racks came to be commonly used.

A real demand for labour-saving machinery arose in Upper Canada, local workmen began to construct reapers and other machines on the American models. This they could readily do as the United States manufacturers did not always patent their implements in Canada.¹ In 1860 it was said that so great has the supply become from our home manufactures that an American made machine is now as great a rarity as a Canadian one was a few years ago, and at the provincial exhibition at Hamilton that year there was not a single implement shown by an American manufacturer.² The local importance of agricultural implement factories was great. The largest and most important of these plants, that of Joseph Hall at Oshawa, serves as an example. In 1864 it was to turn out 700 mowers as well as a number of reapers, threshing machines, and ploughs. It used wrought iron from Glasgow, cast iron (for wheels) from the foundry at Three Rivers; Sheffield steel for moulboards, cutter bars, etc., and Kent County white ash for the wooden parts.³ When it is considered that every town and important village had one or more small factories of this kind, the importance of the industry in the creation of a home-market for agricultural produce must have been considerable.

However, the decline in prices after the collapse of the railway boom of the fifties, and the lower costs of transportation facilitated by railways intensified competition from manufacturers outside the country in

¹ Jones, op. cit., p. 202.

² Transactions of the Board of Agriculture of Upper Canada for 1860-3, p. 50. In Jones, op. cit., p. 202.

³ Canada Farmer, July 1, 1864, in Jones, op. cit., p. 202.

practically all types of manufactured consumers goods. This limited the ability of industry, in spite of protective tariffs, to support a substantially larger population. Since, as we have seen, the agricultural frontier east of the Great Lakes had disappeared, the remaining hope for a continued expansion of the economy lay in the development of the prairies rather than on the intensive frontier.

As with most other colonies under the old colonial system, the economy of the Maritimes was based primarily upon the exportation of a few staples. Shipbuilding was the only manufacturing industry of importance, and after the advent of steam and iron, underwent a steady decline. Agriculture was influenced by the immediate demands of the staple industries and by the geographic background. Insolated patches of arable land resulted in a close liaison between agriculture and lumbering, with the advantage in most cases being mostly with the latter.¹ Well timbered ridges bounded fertile valleys where farming was possible.

Another very important cause for such a small quantity of land being under tillage was the widespread tendency of the people to engage in lumbering and shipbuilding. As the forests of New Brunswick afford an unlimited supply of timber for those purposes...the cultivation of the soil has therefore occupied only a secondary consideration. Distracted as the attention of settlers has been with a speedy realization of wealth presented by lumbering operations, the hardiest of the population...have spent the winter campaigning in the forests; while in the spring when they should be clearing and preparing their land, they are engaged in floating their timber down the rivers, to the neglect of farming operations.²

Thus, much New Brunswick timber, and many of the ships were produced

¹ A.R.M. Lower and H.A. Innis, Settlement and The Forest and Mining Frontiers in Eastern Canada (Toronto: The Macmillan Company of Canada, 1936), p. 37.

² Innis and Lower, Select Documents In Canadian Economic History 1763-1885, p. 685.

by settlers, nominally farmers. Paradoxically, New Brunswick farmers bought farm produce from merchants with which to carry on timber operations.¹

When the timber trade prospered, neither the farmer lumberman, or the timber merchant cared much about the source of provisions, so long as the supply was abundant and cheap. Only when the timber trade experienced difficulty was attention focussed upon agriculture. That the state of agriculture in New Brunswick did not pass without concern is indicated by these remarks of Governor Douglas at the opening of the 1825 Legislature:²

Vast sums are sent from this province, in specie, for the purchase of foreign agricultural produce...agricultural, emigrant, and other societies should be encouraged...to augment the production of subsistence.

In 1832 it was complained that "to the disgrace of the inhabitants of the province (of New Brunswick), who might be independent of others for bread-stuffs by more industrious attention to cultivation of the soil, from 50,000 to 60,000 barrels of flour and meal, and from 3,000 to 4,000 quintals of bread, besides Indian corn, have been for some years annually imported from the United States."³

This, in spite of grain bounties which had been in existence since 1817 indicated that, as a similar bounty system in Nova Scotia from 1805 to 1817 had done,⁴ wheat crops in the Maritimes could not compete with outside sources.

By the eighteen-forties Nova Scotia, as well as New Brunswick and Prince Edward Island turned more realistically to develop the latent domestic possibilities of animal husbandry rather than cereal husbandry. Government

¹ V.C. Fowke, Canadian Agricultural Policy (Toronto: University of Toronto Press, 1946), pp. 47,48.

² As quoted in Ibid., p. 52.

³ Ibid., p. 50.

⁴ Ibid., pp. 35-36.

aid took the form of grants to agricultural societies, but were a trifling portion of the annual budget. Such efforts were unseccesful in producing a domestic agriculture adequate to commercial needs. Prince Edward Island alone among the Maritime colonies became an agricultural colony. There alternative opportunities of greater attractiveness than agriculture were early exhausted. In Nova Scotia and New Brunswick, lumber, fishing, and shipbuilding continued to hold greater attractiveness, and at Confederation these colonies were more dependent on outside agricultural supplies than ever before.¹

¹ Ibid., pp. 61-66.

The agricultural significance of Confederation lay in the realization, firmly established as we have seen during the eighteen-fifties, that immigration, agricultural settlement, and wheat production could work together to provide an expanding frontier which would stimulate the economy. With all the best, and much of the fair, agricultural land occupied in the eastern provinces, the federal government became in fact the administrator of the western empire in trust for the original provinces of the Dominion.¹

There was, however a sharp revival of the defence function of agriculture in the Canadian west.² The Oregon boundary dispute, though settled, pointed to the inherent danger involved in a vacant northwest³ to the "manifest destiny" of Canada.⁴ The westward expansion of the United States threatened to spread northward. In 1850 the territory of Minnesota had a population of 6,000 exclusive of Indians. By 1860 there were 172,000 in the state, of whom 1,600 were in Pembina County on the Canadian border.⁵

¹ Fowke, op. cit., p. 160.

The territories of the Hudson's Bay Company did not come under the control of the Dominion Government until the passing of the Ruperts' Land Act by the British Parliament in 1870. This transformed the original Dominion from a federation of equal provinces vested with control of their own lands, "into a veritable empire in its own rights, with a domain of public lands five times the area of the original Dominion, under direct federal administration." Chester Martin, Dominion Lands Policy, (Toronto: The Macmillan Company of Canada Limited, 1938), p. 223. For the new province of Manitoba as well as for the North-west Territories "all ungranted or waste lands" were by statute to be "administered by the Government of Canada for the purpose of the Dominion" (Manitoba Act Statutes of Canada, in Martin, op. cit., p. 223.)

² Ibid., p. 162.

³ A.S. Morton, A History of The Canadian West (New York: Nelson & Sons, 1939), p.825.

⁴ W.A. Mackintosh, Prairie Settlement The Geographic Background (Toronto: The Macmillan Company of Canada Limited 1935), p. 28.

⁵ Ibid., p. 27.

The chartering of the Northern Pacific in 1864, and after that of the Union Pacific in 1862, stressed the northward pressure in American expansion. By 1870 Sir. John A. Macdonald admitted it to be obvious that "the United States Government are resolved to do all they can, short of war, to get possession of the western territory, and we must take immediate and vigorous steps to counteract them. One of the first things is to show unmistakably our resolve to build the Pacific Railway."¹

Agriculture in the Red River colony had demonstrated that improved means of communication were imperative before an agricultural frontier could hope to become successful.

Its initial difficulties, its adversities of climate and season, the opposition ending in violence of the North West Company, and the shortcomings and mistakes of the colonists themselves resulted in a hybrid economy at once nomadic and sedentary. In the early years of crop failure and violence, the buffalo hunt at Pembina or the fisheries of Lake Winnipeg were the recourse of the Selkirk Colonists as they were of the native Metis. The grasshopper plague of 1818-20 was followed by the great flood of 1826. Not till 1827 did a series of good crops begin, and did agriculture become established in Red River. The introduction of cattle in 1822 and 1823 had only limited success as had that of sheep in 1823. The severity of the winters and the attacks of the wolves prevented the development of a pastoral economy. The consequence of the slow establishment of agriculture in Red River over fifteen uncertain years was the fusion of the new agricultural economy with the old hunting economy of the fur trade.²

¹ Joseph Pope, Correspondence of Sir John Macdonald (Garden City, N.Y. 1921) pp. 124-125. in Martin, op. cit., pp. 225-226.

² W.L. Morton, "Agriculture In The Red River Colony", Canadian Historical Review, V. 24 (1949), p. 306.

The dominance of the buffalo hunt in the Red River economy, caused at first by the failure to create quickly a successful agricultural base, continued to set up an internal check on the development of the economy toward a purely agricultural community. Alexander Ross, after noting that both hunts and crops were uncertain wrote:¹

In the present state of things [1852] their interests [those of the hunters and farmers] are exactly opposed to each other, inasmuch as a market for one party shuts up all prospects against the other. When the plains fail the farmer's produce is in demand; and when the crops fail, the hunter finds a ready market. Neither hunt nor agriculture could displace the other, and each depressed the price of the others produce in a limited local market.

From the fatal check of this internal equipoise only the development of an export market for agricultural produce could free Red River. To that development both an export staple and transportation were necessary.²

Perhaps the real significance of the Red River colony was that its existence indicated the possibility of agricultural development of the west. W.L. Morton suggests that it made important contributions to the adaptation of technique to prairie farming³ and the development of an early maturing variety of wheat.⁴

¹ Ross, Red River Settlement, pp. 334-335 in Ibid, p. 316.

² W.L. Morton, op. cit., p. 316.

³ By 1830 summerfallow was apparent standard practise among the better farmers. Gunn, Statistics Of Red River, p. 381; Nor'wester December 28, 1859, in Ibid., p. 314.

⁴ It has been the usual belief that a major difficulty confronting Red River agriculture was the periodic occurrence of early frost and the consequent unreliability of the main crop- wheat. W.L. Morton suggests there is ample evidence to indicate that wheat in the Red River district matured in much less than 137 days as held by most prominent historians including the late A.S. Morton in his History of Prairie Settlement and History Of The Canadian West. It is to be noted that in the Red River valley the average frost-free period is 120 days and in the Saskatchewan valley 110.

The first seed wheat was introduced from the British Isles in 1812; both fall and spring wheat failed completely.¹ On June 5, 1820, two hundred and fifty bushels of wheat were brought into Red River from Prairie de Chien, in what was then Wisconsin territory, and sown at once.² Some of it matured sufficiently to produce seed. It had at once been subjected to natural selection of the severest sort, for plainly only the hardiest and earliest strains would mature after the June sowing. In 1826 the "great flood" caused the wheat to be sown even later than in 1820. Again only enough wheat was saved for seed. Drought years of the eighteen-forties acted to submit the grain further to a process of natural selection which resulted in a strain peculiarly adapted to the prairie climate.³ Attempts were made to improve the strains of wheat. "Black Sea" wheat, had been introduced in 1848 and Hind reported in 1837 experimentation with an early maturing Scotch wheat was carried on.⁴ An account in the Nor'wester points to a considerable degree of experimentation and, if the crop season of the Prairie du Chien, the chief strain before 1850, has not been underestimated, the possession by Red River farmers of wheats that would mature in about 100 days.⁵

The two processes of adaptation, one by natural selection, the other by experiment, the former pointing back to primitive subsistence economies, the latter forward to staple agriculture, represent the full measure of agricultural success in Red River.⁶ The failure of Red River agriculture in spite of its success in adaptation, is to be explained in part by the inherent limitations

¹ A.S. Morton, History of the Canadian West, pp. 553-55

² Ibid., p. 646.

³ W.L. Morton, op. cit., pp. 308-311.

⁴ Provinces Of Canada, Journals Of The Legislative Assembly, 1858, app. 3, para. 230 in Ibid., p. 314.

⁵ Canada, Senate Journals, 1887, XXI, Appendix I, pp. 165-6, in Ibid., p. 314.

⁶ W.L. Morton, op. cit., p. 315.

of that economy, which were of course aggravated and perpetuated by the transportation problem.¹

Red River agriculture was further limited by the scarcity of farm labour. As long as the Metis could make a precarious living by the hunt, or in the boat or cart brigades of the Hudson's Bay Company, they would not return to the drudgery of the farm. Many young men of British and Canadian blood emigrated, to the more favourable environment of the American west. Red River agriculture could not hold a labour supply great enough for expansion away from the rivers.²

The Red River colonies and their limited success probably furthered the prevalence of uncertainty as to the agricultural potentialities of the west, but would certainly indicate possibilities. The British government through the Select Committee Of The House Of Commons 1857, and the Canadian government, as sponsor of exploratory expeditions in 1857 and 1858, attempted to determine more precisely the exact nature of these possibilities. The leaders of these expeditions Palliser and Hind respectively, were strikingly in agreement in their general conclusions.

Captain Palliser, as a result of his explorations, divided the country between the Laurentian Shield and the Rockies into two parts, the "fertile belt" and the semi-arid desert. The fertile belt was the wooded and park area,

¹ Ibid., p. 316. The need of a supply of fresh water and of easy summer and winter communication determined the adoption of the river lot survey of Lower Canada. Thomas Simpson, the artic explorer, wrote to his brother about 1850: "The banks of the river are cultivated to the width of from quarter to a half mile. All the back level country remains in its original state..." (A. Simpson, Life And Travels of Thomas Simpson (London: 1845), pp. 85-6, as quoted in Ibid., p. 317.) This condition remained for various reasons such as the imperative needs of water and timber (which grew mostly along river banks) and the most tillable soil being along the river banks (ploughs in use would scour more satisfactorily in the sandy silt of the delta.)

² W.L. Morton, op. cit., pp. 317-19.

and the more or less arid "desert" was the treeless prairie, the "true prairie".¹ Palliser's description of the arid desert came to be known as "Palliser's triangle". Its broad base extends along the forty-ninth parallels from Turtle Mountain at 100° west longitude to the foot of the Rocky Mountains at 114°. From here it runs north-northwest to Old Bow Fort about fifty miles west of Calgary, then north-northeast to a point just short of latitude 52° and longitude 114° in the vicinity of the present town of Olds, Alberta, thence from there south-east to the eastern limit of the base at Turtle Mountain. Palliser reported that:²

This line marks the boundary of two natural divisions of the country, viz., the ancient forest lands and the true prairie district. To the north of this line generally there is timber, a good soil for agricultural purposes up to 54° north latitude, and superior pasturage; to the south there is no timber, the soil is sandy, with little or no admixture of earthy matter, and the pasture is inferior.

Similarly, Professor Hind considered the treeless portions of the prairie level as unsuited for agricultural settlement:

The boundary of the prairie country, properly so called, may be roughly shown by a line drawn from the great bend of the Little Souris, or Mouse River, to the Quappelle Mission, and from the Mission to Moose Woods, on the South Branch (of the Saskatchewan River). South and west of this imaginary line, the country, as a whole, must be ranked as a level or slightly undulating treeless plain, with a light and sometimes drifting soil, occasionally blown into dunes, and not in its present condition fitted for the permanent habitation of civilized man.³

These and similar views were instrumental in the choice of the fertile belt of the Saskatchewan river as most productive from the railway point of view. Accordingly the line from Fort William which was to reach the Red River at a point which was given the name of Selkirk, was to pass between

¹ W.A. Mackintosh, op. cit., p. 31

² Ibid., p. 38.

³ Ibid., p. 37.

Lakes Winnipeg and Manitoba, crossing the latter at the Narrows, and was to run in a northwesterly direction to the valley of the Swan River. It was there to turn westward, and cross the South Saskatchewan about twelve miles north of the present site of Saskatoon. Reaching the North Saskatchewan at the Elbow, it was to follow the south bank of the river to Battleford, and thence to run westward to a point south of Edmonton, and so to the Yellowhead Pass.¹

There had been, however, exception taken to the views held by Palliser and Hind (and others) regarding the agricultural potentialities of the "arid plain". The most notable was that of John Macoun who, having surveyed the region from the Peace River to the international boundary concluded that:²

If a line be drawn from the boundary line where it is intersected by the 95th meridian, in a northwesterly direction to where the 122nd meridian intersects the 61st parallel, we shall have the base of an isosceles triangle, which has its apex on the 115th meridian where it intersects the 49th parallel, one side being the boundary and the other the Rocky Mountains. This triangle encloses at least 300,000 square miles, or over 200,000 acres of land. In a rough classification I estimate 80,000,000 acres as arable land, and 120,000,000 as pasture, swamps, and lakes.

Important observations were made regarding the Souris River Valley and the Regina plain:³

Although the ground appeared hard and dry it is not so. In reality about eighteen inches of the surface was quite soft and so easily penetrated, that almost without an effort, a spade could be thrust into it up to the head. Beneath this the clay was very hard and dry. All the spring and summer, rain enters the soil quite easily, by means of the cracks surrounding each hummock...The moisture descends almost at once into the soil, and owing to the imperviousness of the clay, is retained near the surface, or just below where the soil is friable. The winter frosts expands this moist soil, and instead of these cracks being caused by the sun, they are frost cracks, produced by the heaving of the soil.

¹ A.S. Morton, History of Prairie Settlement (Toronto: The Macmillan Company of Canada Limited, 1938), p. 51.

² J. Macoun, Manitoba And The Great North West (Guelph: World Publishing Company 1882), p. 198.

³ Ibid., p. 58.

Macoun attributed the richness of the grass in the region to the moisture retained on the clay bed and inferred that all the country would make a great wheat region. These views had a great influence on the spread of settlement over the plain, but more immediately on the change of the route of the trans-continental railway through the so called fertile belt to the south, much nearer the international boundary.¹ The change had the added advantage of excluding United States railways from exploiting Canadian territory.²

The most important feature of economic life in a colony or a newly settled community is its commercial connection with the rest of the world. Upon this more than on any other circumstance depends its prosperity. It may be true, as a great rule, that "the colony of a civilized country which takes possession of the waste country or one so thinly inhabited that the natives easily give place to the new settlers, advances more rapidly in wealth and greatness than any other human society". (Adam Smith), But this progress does not take place unless the colony possesses markets where it can dispose of its staple products.³

The fate of the Red River colonies had been practical confirmation of this self-evident axiom of economics and demonstrated the imperative necessity of improved transportation for the success of western Canadian agriculture. The development of prairie agriculture and government policy respecting it was dominated by this impervious need. Western Canadian agriculture continues and will continue to be highly sensitive to transportation problems.

The prime assumption of all plans for transportation to and from the Northwest, as prepared by Canadians was that the railway should be through British territory. There is evidence which would seem to suggest that the "all Canadian" route served to retard the early development of prairie agriculture.

¹ Mackintosh, op. cit., p. 51

² Ibid., p. 73.

³ G.S. Callander, Economic History Of The United States (Boston: 1909), p.6, in Mackintosh, op. cit., p. 45.

An Englishman from British Columbia ¹ proposed that the Northern Pacific railway be utilized as a link connecting two Canadian companies, one in Ontario which would build to the Sault Ste. Marie, and one in the Northwest which would run from the international boundary at the Red River by way of the Yellowhead Pass to the Pacific coast. Transcontinental traffic whether American or Canadian was to pass over these lines, Portland, Maine, being designed to be the Atlantic terminus. From the economic standpoint of the Northwest this scheme would have offered many advantages. It would have met the immediate need for transportation in the shortest possible time. James Trow, member of parliament, writing from Winnipeg on July 30, 1879 said: "I believe it would have been to our advantage had the Government or a Canadian company years ago leased the Northern Pacific and constructed this road to Winnipeg (from Emerson on the border). We hold undisturbed possession of the Portland branch of the Grand Trunk and could have so managed matters as to have management of this line for the next half century."²

The refusal of the government to consider lines of communication connecting with the east, however temporarily, over the railways of the United States, meant that the railway only entered the country ten years after immigrants had begun to come in. The early settlers followed trails leading in different directions and settled in too wide a territory for a single railway line to serve, with the result that when the Canadian Pacific reached Brandon in 1881, the extreme limit of settlement westward, its single line running across the province was already inadequate. ³ The twenty year monopoly

¹ An equally compelling motive for the building of the railway to the Pacific was the terms under which British Columbia entered Confederation. The Dominion was committed to build a railway within ten years from 1871.

² A.S. Morton, History of Prairie Settlement, pp. 52-53.

³ Ibid., p. 66.

of traffic in the south granted the Canadian Pacific hindered the building of branch lines until 1888 when the right was rescinded at the insistence of the Manitoba legislature.¹ Perhaps the greatest significance of the all Canadian route, both in the short and long run, lay in the high rates necessary to cover the running expenses of the long unproductive line north of Lake Superior.² These rates constituted a tax on the trade of the west. In addition, the transfer of the task of building the transcontinental railway to private enterprise with the enticement of 25,000,000 acres of land "fit for settlement" - the best - (as well as other concessions) made the Canadian Pacific the largest land holder and potent immigration agency next to the government. However, railway property, and the portion of the 25,000,000 acres unsold were left free from taxation forever, whether by Dominion or Province. This threw the whole burden of developing local communications, and community organizations on the settlers. Their difficulties in this respect were increased by the fact that the railway grant consisted of the odd numbered sections extending twenty four miles deep on each side of the proposed railway line from Winnipeg to Jasper House.³ and the reservation of the odd numbered sections of Dominion land from settlement. Settlers taking advantage of free homesteads⁴ were thinly dispersed over wide areas adding to the difficulty of local improvements.

¹ Ibid., p. 67. For twenty years "no line of railway shall be authorized by the Dominion Parliament to be constructed south of the Canadian Pacific Railway, from any point at or near the Canadian Pacific Railway, except such as shall run South-West or to the westward of south-west, nor to within fifteen miles of Latitude 49° (clause 15 of "An Act respecting the Canadian Pacific Railway).

² The practical monopoly enabled the Company to fix its rates to cover these expenses.

³ If there was found to be insufficient suitable land along this stretch of the railroad to fulfill the 25,000,000 acre grant, the deficiency was to be met from other portions lying in the so-called "fertile belt" (section II of an Act Respecting The Canadian Pacific Railway).

⁴ Embodied in the Dominion Land Act, 1872.

These were some of the factors related to the 'all Canadian' route, contributing to the immediate and disappointing results of Confederation, insofar as the development of western agriculture in stimulating the economy was concerned. In 1886 the population of Manitoba and the North West Territories was but 196,424.¹

The theory behind the railway land grant was that the railway should be financed out of the land through which it passed. With few exceptions railways built into unoccupied country failed to secure substantial revenue from their land grants during construction or during the early years of operation. The grants were, in effect huge land reserves from which the railway promoters (or their successors) derived benefit a generation after the railway had been built.² This has proved true no less of the Canadian Pacific than of other land grant railways.³

Twenty-five million acres of land "fairly fit for settlement", twenty-five million dollars in the form of a cash subsidy, portions of the line already built at a cost of some thirty-five million dollars, exemption from tariff duty on all material for construction and from taxation on all railway property, and twenty year monopoly of traffic in Western Canada were conceded in the original

-
- ¹ J.T. Culliton, Assisted Emigration and Land Settlement, McGill University Economic Studies No. 9 (Montreal: The Federated Press Ltd. for the Department of Economics and Political Science, McGill University 1928), p. 24.
 - ² R.G. Riddell, "A Cycle In The Development of The Canadian West", Canadian Historical Review V.21 (1940), p. 274.
 - ³ A. C.P.R. official before the Saskatchewan Resources Commission stated, "In the first years our efforts were more directed to the settlement of the homestead than to the selling of our own lands", Martin, Dominion Lands Policy, op. cit., p. 405. This had the twofold effect of increasing traffic and enhancing land values. The Report of the Company for 1884 states: The directors have devoted their attention almost entirely to promoting the settlement of the free Government lands within the railway belt and south of it to the International boundary, meanwhile making little effort to effect sales of its own lands. Until the free homesteads are pretty well taken up and occupied, there cannot be any great quantity of land sold to settlers. The free homestead lands in the railway belt and south of it, as far west as Moose Jaw, are already taken up, and it cannot be long before there will be a good market for the Company's lands in all that section of the country, when the great importance of the land grant as an asset of the Company will begin to be appreciated (Martin, op. cit., p. 317.).

terms. Subsequently the government came to the aid of the company with additional loans to the amount of approximately twenty-seven and a half million dollars. The price was so great it almost seemed as though a Pacific railway, built at government expense had been present to the men who built it.¹ However, it would appear that the Dominion was fortunate that the enterprise came into the hands of men with the initiative and efficiency to press the gigantic undertaking through to its completion.² It is doubtful if the government services as they were then established would have been equal to the task and if so to have performed the task at less cost.³

"Dominion Lands" policy, though enabling Parliament to "pledge its faith to the world that a portion of those [western] lands should be set apart for free homesteads to all coming settlers, and another portion to be held in trust for their children,"⁴ contributed to problems associated with the early development of the west.

¹ Riddell, op. cit., p. 273.

² On December 29, 1884, Canadian Pacific stock on the New York market was at 43½ and Rose (of Morton, Rose and Company, one of the members of the syndicate receiving the charter) predicted that if the Canadian Pacific passed the next dividend it would have a disastrous effect on the permanent credit of the Company. Stephen and Smith (two of the main promoters) met this crisis by borrowing \$650,000 on their personal credit and paid the dividend, and endorsed a five month note for a million dollars to provide current funds to keep the company going: D.C. Master, "Financing The Canadian Pacific Railway 188-85", Canadian Historical Review, V. 24 (1943), p. 360.

³ Riddell, op. cit., p. 274.

⁴ Report of Committee of Privy Council, May 30, 1884. Sessional Papers of Canada 1885, No. 61, as quoted in Martin, op. cit., p. 400. "No phase of Dominion Lands policy has commanded wider admiration than the provision in the Dominion Lands Act of 1872 for setting aside sections 11 and 29 in each township as an endowment for public schools". Martin op. cit., p. 335.

The free homestead system had been inaugurated to promote rapid settlement. "It would be injudicious", said Sir John Macdonald at the time of the chartering of the province of Manitoba in 1870, "to have a large province which would have control over lands and might interfere with the general policy of the Government in opening up communications to the Pacific; besides the land regulations of the Province might be obstructive to immigration. All that vast territory should be for purposes of settlement under one control, and that the Dominion legislature."¹ As the tide of settlement began to flow, a hard driven provincial government in Manitoba found itself unable to cope with its responsibilities. The Dominion could supply the settler with a free homestead, but schools and roads had to come from the provincial treasury. Deprived of the land as a source of revenue, and for twelve years with no "subsidy in lieu of lands", the Province of Manitoba was inclined to trace its fiscal embarrassment in no small measure to Dominion Lands policy. Similarly in the North West Territories "the immigrant was a distinct asset to the Dominion and a distinct liability to the territories with their increased need for local improvement".² School and local improvement taxes levied on a quarter section of land in the territories in 1901 amounted to about five dollars.³ Further taxes were discouraged as militating against the work of the Dominion government in its encouragement of immigration. "Possessing no capital account, the north-west authorities were not disposed to levy a high rate of taxation on the pioneer struggling to build his new

¹ In Martin, op. cit., p. 227.

² Statement of Sir Fredrick Haultain, Premier of the North West Territories during the autonomy struggle, made in personal interview, as quoted in C.C. Lingard, "Economic Forces Behind The Demand For Provincial Status In The Old North West Territories", Canadian Historical Review, V. 21 (1940), p. 255.

³ Macleod Gazette, May 24, 1901, in Ibid., p. 259.

home, at a time when the territorial domain was under the control of the federal government, the holdings of various corporations exempt from taxation though enhanced in value by local improvements, and the Dominion grant limited to an amount far short of the urgent need of the country."¹

In no respect were the Territories so much at the mercy of forces beyond their control as in the matter of railway facilities. The territorial government possessed no power to charter railways or grant them cash assistance. In the years following 1897, when immigration and production were increasing at an unparalleled rate, the territorial government forwarded addresses and resolutions annually to Ottawa on behalf of struggling pioneer communities, twenty, thirty, and even fifty miles from the nearest railway. Thus, in the territories the problems posed by Dominion Lands policy were accentuated by the disadvantages of remote control from Ottawa by officials who often had no knowledge of local conditions or problems.²

It was thus that the economic consequence of the 'all Canadian' route, and the Dominion Lands Policy were instrumental in adding to the hazards with which the settler - the man in the front line - was beset in his conquest of the frontier. Failures in the taking of the first objective are marked by the number of homestead failures.³ The Report Of The Department Of The Interior, 1886⁴ shows the following:

<u>AGENCY</u>	<u>HOMESTEAD</u>	
	<u>Enteries</u>	<u>Cancelled</u>
Qu'Appelle	149	255
Souris	160	265
Winnipeg	87	104
Dufferin	13	77

¹ N.W.T. Sessional Papers, 1903 (first session) 10-13, Haultain to Laurier, December 7, 1901, as quoted in Ibid., p. 259.

² Ibid., p. 261.

³ Martin, op. cit., p. 434.

⁴ As quoted in Ibid., p. 84. It should be noted that 1886 was a year of general drought.

However the vagaries of the prairie climate did not make the task any easier for the front line combatants as this description of a skirmish indicates:¹

[In 1885] we had only 10 bushels [per acre] of very badly frosted wheat. I took some to Indian Head and traded it for flour, shorts, and bran. I had no money to pay expenses...In 1886 we had 80 acres under crop. Not a drop of rain fell from the time it went in until it was harvested. I sowed 124 bushels and threshed 54. In 1888 we began to think we could not grow wheat in this country. I had now 120 to 125 acres under cultivation. We put in 25 acres of wheat, 10 to 15 acres of oats, and let the rest go back into prairie. That year we got 35 bushels [of wheat] to the acre. So we went to work and ploughed up again. The next year wheat headed out two inches high. Not a drop of rain fell the whole season until fall. We summerfallowed that year (1889) for the first time, and, to show the optimism, we put in in 1890 every acre we could. We had wheat standing to the chin but on the 8th of July a hailstorm destroyed absolutely everything. My hair turned gray that night.

It was probably a combination of varying circumstance which prevented the hopes which had been built around the Canadian west at the time of Confederation from being fully realized until after 1900. From 1867 to 1899 one million and a half immigrants entered Canada compared with two and a half million in the period 1900-13.² Perhaps the greatest single detriment to immigration to the Canadian west in the period up to 1900 was the greater attractiveness of the American west, made even more pronounced, as we have seen, by the difficulties with which western Canadian local administrative organs were fraught. During the decade 1881-90 Canadian immigration totalled 885,000 as compared with immigration to the United States totalling 5,570,000, and with Australian immigration during the twelve year period 1879-90 of 2,563,000.³

¹ The experience of Mr. Alexander Kindred, pioneer of Moffat, Sask., as quoted in Ibid., p. 86.

² Fowke, op. cit., p. 173.

³ Reports of the Select Committee on Agriculture and Colonization, Canada House of Commons, Journal, 1892, app. No. 2. pp. 141, 144 as quoted in Ibid., p. 173. Immigration is distinguished from Settlement. For the period 1879-90 Australia recorded emigration of 1,845,000. For the decade 1881-90 estimates for the United States were that immigration plus natural increase was only 12,466,500. From 1871 to 1891 the estimated immigration to Manitoba totalled 320,000 while the census indicated a population increase of only 200,000, a loss of 130,000 with no account taken of natural increases. (Ibid., p. 173.)

The purpose of Confederation in its relation to the west had, however, not been forgotten, or given up, as indicated by the following statement of the Minister of the Interior at the time of the formation of the provinces of Alberta and Saskatchewan when it was once again decided in the best interests of that purpose to retain control of Crown lands in the hands of the Dominion government;¹

The interest of the province in the land is in the revenue it can derive from the sale of the lands; the interest of the Dominion in the lands is in the revenue it can derive from the settler who makes that land productive. This Dominion of Canada can make millions out of the lands of the Northwest and never sell an acre; it has made millions out of these lands without selling an acre... The increase in our customs returns, the increase in our trade and commerce, the increase in our manufactures, is to a very large extent due to the increase in settlement on the free lands of the North West Territories... The interest of the Dominion is to secure the settlement of the lands, and whether with a price or without a price makes little or no difference. It is worth the while of the Dominion to spend hundreds of thousands of dollars in promoting immigration... in surveying and administering these lands, and then to give them away.

Though on a comparative basis the progress of western Canadian agriculture up to 1900 was not impressive, the achievements made were important and very significant for its phenomenal development and expansion of product in the period following 1900. Rainfall deficiency is perhaps the most important single factor in agriculture on the Canadian plains. It divides the history of settlement into "good" and "bad" years. It has been the chief conditioning factor of agricultural practise. In most years rainfall is deficient only in the sense that it is not adequate except for drought-resisting crops on land tilled by moisture conserving methods. It is approximately true to

¹ Hon. Frank Oliver, Minister of the Interior, in Debates of House of Commons, 1908, (Ottawa: Kings Printer, 1908), vol. VI, pp. 3157 ff.

say that over nearly the whole of the West the agricultural economy is focused on the conservation of moisture.¹ In this, the most significant development had appeared in the period prior to 1900.

From the point of view of wheat growing there is more than one climate in the Canadian west. The difference between one and the other is measured in terms of moisture - in terms of a very few inches of precipitation. Melting of the snow in spring usually provides sufficient moisture for germination. As the grains grow their need for moisture increases, especially during the crucial 'filling' period. The distribution of rainfall is admirably suited to this need. On the average 5 per cent of the total precipitation for the year comes in April, 12 per cent in May, 15 to 20 per cent in June, and the same in July, and 10 to 15 per cent in August. Were this average maintained most of the troubles of the grain grower would pass away, but the average is made up of extremes and does not preclude occasional years of great drought, nor cycles of dry years - years in which a few inches of rain less, or the precipitation coming at the wrong time, makes for crop failure.² The most effective means of minimizing the effects of these inevitable deviations from the average has proved to have been through the medium of summerfallowing. It had been one of the contributions of Red River agriculture in the adaptation of technique to prairie agriculture. That the practise of summerfallow and its advantages had not been forgotten, or at least had been rediscovered, is evidenced by this report of the Brandon agent on the general drought of 1886. Speaking of drought in July he:

¹ Mackintosh, op.cit., p. 14.

² Martin, op. cit., p. 82.

reported that it¹

caused the yield to be much below the average. There have, however, been some heavy crops, not in any particular district nor on account of the quality of the soil but owing to the cultivation. I found the best crop on summerfallow, next on breaking and back-setting, while fall stubble ploughing was not good, and spring ploughing was worthless, and I account for it in this manner. In summerfallow, the stubble and weeds are ploughed under and have time to rot, the ground also becomes settled by the winter frosts and snow, and evaporation is slow. The breaking and backsetting is naturally rough and more open, and the sod not being all rotted, cannot be pulverized by the harrow and dries quickly.

Further west in the Indian Head Area (near Regina) the advantages of summerfallow had been discovered and was to become even more important since average precipitation diminishes as one proceeds westward. During 1885, a large proportion of horses were engaged in supply columns supporting forces suppressing the Riel rebellion with the result considerable ploughing in the Indian Head area was done in June. A large proportion of the area under crop in the drought year of 1886 was consequently on summerfallow. The crops on these fields gave a tolerable return whereas they were a complete failure on ground ploughed that spring. Thus it began to appear in this area also that suitable cultivation could to some extent mitigate the evil effects of drought.²

As the desirability of the practise of summerfallowing became generally recognized it became clear that the 160 acre homestead, in areas where summerfallowing was necessary on a large scale, could never be a satisfactory farm. The economic necessity of larger units was inadvertently facilitated as a by-product of Dominion Lands policy, particularly as a result of the Canadian railway land grant system. More than twenty-four per cent of Dominion lands

¹ Morton, *op. cit.*, p. 83.

² *Ibid.*, p. 84.

alienated from 1870 to 1930 were to be found for sale in the form of railway lands, usually on moderate terms, in odd numbered alternate sections uniformly "fairly fit for settlement," and regularly adjoining the most eligible agricultural lands in western Canada.¹ It was the settled policy of the C.P.R. to expedite the tendencies toward the 320 acre farm. "The Company's lands are seldom sold to new immigrants, but generally to those who have already established themselves on free homesteads and who from their improved condition are able to increase their holdings by the purchase of adjoining railway lands."² The advantages of the happy integration of the free homestead and railway land grant systems were aptly described by the Minister of the Interior in 1908:

The fact that the settler coming from the United States and from Eastern Canada has been able to homestead a quarter section free and to purchase an adjoining quarter section, has been a great inducement to the settlement of our country so far as it has gone. The belief there is that 160 acres may be a good farm but that 320 acres is a very much better farm, and the fact that a 320 acre farm could be acquired at a reasonable price by locating a homestead on an even-numbered section and purchasing from the railway company on the odd-numbered section, we believe has been a very great incentive to the settlement of our country by the best class of people, that is, people with means and ability to carry on farming operations on a considerable scale.³

In dry farming areas where the railways had not seen fit to select the odd-numbered sections as their land grants, the "purchased homestead" and "pre-emption" were introduced in an attempt to preserve the virtues of the railway land grant system. The homesteader was entitled to purchase at \$3.00 per acre a quarter section of Dominion Lands adjoining his own homestead. For

¹ Martin, op. cit., p. 414.

² Annual Report of the Canadian Pacific Railway 1893, p. 17, Ibid., p. 415.

³ Martin, op.cit., p. 415.

the established settler who found no contiguous quarter section available, the right of "purchase homestead" gave him the right of pre-emption elsewhere.¹

The trend to larger units as a result of, and to facilitate summer-fallowing as an effective dry-farming method was perhaps the most significant development in Western Canadian agriculture in the period prior to 1900 along with the general introduction of Red Fife and the establishment of Dominion Government experimental stations. In the early eighties, Red Fife, because of its superior milling qualities and comparatively early maturing date had become the standard variety of wheat grown in western Canada.² It was, however, subject to the occasional early frosts of the prairie climate, and to this end government experimental stations were largely devoted and established at Brandon and Indian Head in 1888. The Minister of Agriculture in his report of 1887 stated: "The introduction of new and untried sorts of early ripening cereals I regard as one of the most important departments of experimental work bearing on the present and future farming in Canada."³

¹ Ibid., p. 419-20.

² MacGibbon, op. cit., p. 480.

³ Morton, op. cit., p. 71.

Chapter IV - THE GROWTH OF THE WHEAT ECONOMY

The Progress of prairie agriculture up to 1900 can best be measured by examining the progress of the grain trade west of the Great Lakes. During the decade between 1870 and 1880 the fine quality of Manitoba wheat gradually received recognition.¹ One of the main contributions of Red River agriculture was the introduction of the famous Red Fife variety of wheat about 1868.² Its superior milling qualities gave to prairie agriculture a staple which, once its qualities became known, left only the problems of production and transportation to be absolved in order that the purpose of Confederation could be fully realized through the development of the commercial potentialities of agriculture in the great north-west.

The first recorded shipment of wheat from Red River was a small consignment of seed wheat sent to Ontario in 1876. It reached its destination, Toronto, via the water route to Fisher's landing in Minnesota, thence by rail to Duluth, by water to Sarnia, and by rail to Toronto. This roundabout route is some indication of the transportation problem before the advent of direct rail connection with the Lakehead. 'That Ontario, in a situation [a general crop failure in 1876 attributed in large part to poor quality seed] should turn to the west for a superior quality seed which in the first place had come from the eastern provinces³ is striking evidence of the repute in which Manitoba

¹ MacGibbon, op. cit., p. 25.

² Ibid., p. 479.

³ "The home of Red Fife has been traced to Galicia in central Europe, which lies in about the same latitude as western Canada. Red Fife became the standard variety in Ontario, and as early as 1860 passed into use in the United States in Wisconsin. From Wisconsin it appears to have worked its way north through Minnesota and the Dakotas into Manitoba;" Ibid., p. 49.

wheat was already held.¹

In 1878, 1,100,000 bushels of wheat were established in Manitoba. Rail connections with Minnesota in 1879 enabled shipments to move south and in 1880 the whole surplus was purchased by American buyers at prices higher than paid for Dakota wheat near home. 'The explanation is to be found in the high quality of the wheat - "rich in gluten" - which made it especially desirable for mixing with the softer Minnesota wheats.'² The weight of the heaviest samples was sixty-six pounds per measured bushel compared with sixty-five pounds for the heaviest American wheat. Thus from the very outset when Manitoba wheat became available, it achieved a high reputation for strength and excellence.

Completion of the Canadian Pacific Railway between Winnipeg and Port Arthur in 1883 was the first important step in linking the west with export markets. As we have seen, the grain trade in Ontario had developed the technique of handling grain on the lower Great Lakes. All that was required to enable western grain to move out to the east under modern conditions of handling was the construction of a terminal elevator at Port Arthur. The completion of a terminal in 1884 and of the Canadian Pacific in 1885 paved the way for the expansion of the export trade in Canadian grain.

In 1900 the Manitoba wheat harvest yielded 18,592,660 bushels, barley 2,666,803 bushels, and oats 10,592,660 bushels, and in the Territories wheat 5,103,972 bushels, barley 474,554 bushels, and oats 6,061,112 bushels.³ By 1892 exports of wheat from Canada began to show the influence of the western

¹ Ibid., p. 26.

² Ibid., p. 26.

³ Canada Year Book (Ottawa, 1908), p. 85.

yield and were 8,714,154 bushels. In 1900 they were 16,844,650 bushels.¹ In 1892 Canadian wheat, "Manitobas", was quoted for the first time on the Liverpool market.² By 1900 the western grain trade had established itself in the world's markets and had built up a solid reputation for the excellence of western wheat.³

TABLE I
PRODUCTION OF WHEAT IN MANITOBA #

Year	Acres	Yield	Bushels per acre
1883	260,842	5,686,355	21.8
1884	307,020	6,174,182	20.11
1885	357,013	7,429,440	20.8
1886	384,441	5,893,480	15.33
1887	432,134	12,351,724	25.7
1888	518,000	7,000,000	16.2
1889	623,245	7,201,519	12.4
1890	746,058	14,665,769	19.65
1891	916,664	23,191,599	25.3
1892	875,990	14,453,835	16.5
1893	1,003,640	15,615,923	15.56
1894	1,010,186	17,172,883	17.0
1895	1,140,276	31,775,038	27.86
1896	999,958	14,371,806	14.33
1897	1,290,882	18,241,950	14.14
1898	1,488,232	25,313,745	17.01
1899	1,629,995	27,922,230	17.13
1900	1,457,396	13,025,252	8.9
1901	2,011,835	50,502,035	25.1
1902	2,039,940	53,077,267	26.0
1903	2,442,873	40,116,878	16.42
1904	2,412,235	39,162,458	16.52

#Ibid., p. 31.

Indicative of the growing prominence of the western grain trade was the adaptation of marketing technique to its peculiar needs. One of the first

¹ MacGibbon, op. cit., p. 30.

² Ibid., p. 30.

³ Ibid., p. 37.

problems of western agriculture was to secure recognition of western varieties of grain and for western traders. In 1885, by act of parliament the various grades of Manitoba hard wheat and other grades for western wheat were established. In 1885 authority was granted to the representatives of the boards of trade in Manitoba and the Territories including also that of Port Arthur in Ontario, to meet annually in Winnipeg for the purpose of fixing the standards for all grain grown west of Lake Superior. In 1890 it was decided that when disputes concerning grain grown in Manitoba or the Territories occurred, the case should be brought before a Board of Arbitrators who would sit at Winnipeg. By these various measures the statutory regulation of the western grain trade came under local control.¹

In 1887 the portentous Winnipeg Grain and Produce Exchange was formally opened and was incorporated in 1891. Its avowed objects were to centralize the grain buyers and to establish methods of conducting the trade but came, as well to represent the trade where problems of general interest were under consideration.²

The establishment of Manitoba grades had increased the number of Canadian grades which the carriers were asked to handle. A railway committee known as the Trunk Line Committee on Canadian Grain reported that it was an utter impossibility to handle grain under the old plan of preserving the identity of each lot. The committee insisted that all grain exported should be classified on some grading system. In 1892 Manitoba wheat was allotted three grades. Thus the grades numbers one, two and three hard became known at this time as the

¹ MacGibbon, op. cit., pp. 32-33.

² Ibid., p. 34.

export grades.¹ The problem recurred in 1897 when New York absolutely refused to provide for more than fifteen grades of Canadian grain. At the request of the Trunk Lines Committee the exchange named as the export grades for western grain for shipment through New York and Boston numbers one, two and three hard wheat, scoured one and two, number two white and number two mixed oats. However, on a request from Montreal, the grades scoured one and two, number three hard and number two mixed oats were made available to the east. This latter incident reveals the fact that the western grain trade was moving to the position of leadership, and its interests receiving first consideration.² The Manitoba Grain Act of 1900 was "hailed by western grain growers as a veritable Agrarian Magna Carta." It implemented a detailed set of rules for the control of the entire western elevator system both local and terminal under a warehouse commissioner.³

In 1900 the western grain trade was in fact on the threshold of becoming the dominant force in the economy and its interest the interest of nearly all groups in the Canadian Society.⁴ Immigration into western Canada after 1896 began to assume very promising proportions. The United States had become, by this time, a less serious competitor for immigrants. The more fertile areas in the Western States were taken up, and the end of these free lands was in sight. "Wheat mining" had exhausted much of the soil of the western states which forced the substitution of the growth of coarser grains such as corn and barley.⁵

¹ Ibid., p. 34.

² Ibid., p. 35.

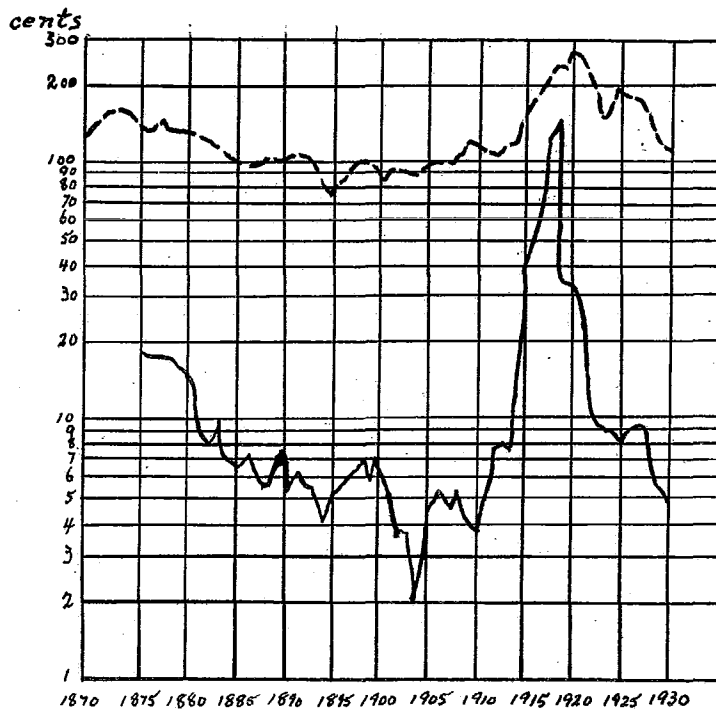
³ V.C. Fowke, "Royal Commissions and Canadian Agricultural Policies," Canadian Journal of Economics and Political Science, V. 14, (1948), p. 169.

⁴ W.A. Mackintosh, Economic Background of Dominion Provincial Relations, Royal Commission on dominion-provincial relations Report, Appendix 3 (Ottawa, 1939), p. 27.

⁵ Gulliton, op. cit., p. 24.

From 1885 to 1895 transportation costs were falling rapidly, but whatever stimulus this might have provided for Canadian settlement, was offset by the even more rapid decline of the Liverpool price of wheat. After 1895 the cost of transportation continued their downward course and remained at the low level attained until 1911; the trend of Liverpool prices was strongly upward. "In this conjuncture lay the economic stimulus which caused the occupation of 73 million acres of land between 1901 and 1916."¹

Figure I #



- - - Prices of Wheat at Liverpool
 ——— Ocean freight rate for wheat (per bushel)
 Montreal to Liverpool

W.A. Mackintosh, Economic Problems Of The Prairie Provinces (Toronto: The Macmillan Company of Canada Limited, 1935), p. 8-10

¹ Mackintosh, Economic Problems Of The Prairie Provinces, p. 10.

Another factor in the rapid settlement of the prairies was the favourable trend of technical efficiency. The agricultural economy of the Canadian west has been based on the twin facts of plentiful land and scarce labour. With progress in the industrial arts, there has been strong pressure in favour of the substitution of capital for direct labour in all fields of production.¹

TABLE II [♠]

PROPORTION OF LAND TO LABOUR IN THE PRAIRIE PROVINCES 1901-1931 [#]

Year	Acres of Occupied Land Per Person Engaged In Agriculture	Acres Of Improved Land Per Person Engaged In Agriculture
1901	184	67
1911	203	81
1916	216	101
1921	234	119
1926	215	119
1931	247	145

[#] Data compiled from Census Of Prairie Provinces, 1926, (Ottawa Dominion Bureau of Statistics Tables 55 and 58; for 1931, Canada Year Book, 1933; 1931)

[♠] Mackintosh, Economic Problems Of The Prairie Provinces, p. 17.

Improved land per person, between 1901 and 1926, increased by somewhat less than 100 per cent; while the acreage of field crops per person increased by approximately 100 per cent - a change in agricultural economy resulting in higher productivity per person.

The reduction of railway rates on grain shipped to the lakehead was of great and lasting significance to prairie agriculture. Rightly or wrongly the

¹ Ibid., p. 16.

monopoly held by the Canadian Pacific Railway in an age of laissez-faire prompted and fostered the belief that railway rates were unduly high.¹ That this belief was not entirely groundless is indicated by Professor Adam Shortt who, having spent the summer of 1894 in the West declared that "in Alberta, at least, so high are the freight rates on the Canadian Pacific that the old system of freighting with horses and wagon has revived in direct competition with the reailroads, and is reported to be a profitable enterprise."²

Of great signifiigance to the western grain trade was the Crowsnest Pass Agreement. In return for a government cash bonus of approximately \$3,400,000 to aid in construction of a railway from Lethbridge through Crowsnest Pass to Nelson, British Columbia, the Canadian Pacific undertook by September 1, 1899 to reduce by three cents per hundred pounds the then existing rates on grain and flour from all points east thereof. From Brandon which was approximately the centre of wheat production at the time, the reduction amounted to nineteen per cent. In addition the railway cut, by fifteen per cent, the rates then applicable to fruits, coal-oil, cordage, implements, various building materials, and furniture from eastern Canada west bound.³ "In brief, in return for a cash subsidy, the Canadian Pacific reduced the freight rates on the chief export of the region and on settlers requirements inbound."⁴ "The lure of a cash bonus, the apparent approach of general and railway prosperity, the possibilities of

¹ Rates were slightly lower than for corresponding distance on American railroads, "but more than the traffic could bear and undoubtedly tended to retard development." Ibid., p. 40.

² A.W. Currie, "Freight Rates On Grain In Western Canada," Canadian Historical Review, V. 21 (1940), p. 40.

³ The Company also conveyed certain coal bearing lands in southern British Columbia to the Dominion.

⁴ Currie, op. cit., p. 41.

a more rapid development of the west, and the threat of a competing line of railway¹ induced the Canadian Pacific to accept the Crowsnest Pass Agreement."²

The next event of major importance in the reduction of railway rates on grain was the Manitoba Agreement, instrumental in the building of the Canadian Northern from Winnipeg to Lake Superior in direct competition with the Canadian Pacific. In return for a guarantee by the Manitoba government of the interest on bonds at the rate of \$20,000 per mile for 290 miles the railway agreed to reduce the existing rate on grain from Manitoba to Lake Superior by more than four cents a hundredweight and the rates on all other freight in both directions by more than fifteen per cent of the rates then in force. The object of the Manitoba agreement was to "secure to the people of Manitoba a reduction of freight rates surrounded and cemented by indisputable security."³

For a time the Canadian Pacific refused to reduce its rates to the level of those on the Canadian Northern, but because of complaints of discrimination by those not on Canadian Northern lines the Manitoba government negotiated an agreement with the Canadian Pacific Railway effective October 7, 1903, whereby the latter reduced its rates on grain from fourteen to ten cents per hundredweight for the haul from Winnipeg to the Lakehead on condition that the Canadian Northern reduction would be limited to this amount. Although the Manitoba Agreement applied only to that province, the Canadian Pacific soon voluntarily

¹ Unless the Canadian Pacific reduced rates the Manitoba government threatened to aid the construction of a railway line running direct from Winnipeg to Duluth.

² Currie, op. cit., p. 42.

³ Railway Commissioner of Manitoba, Report for the Year 1901, Ibid., p. 43.

made equivalent reductions in the area beyond Manitoba. Thus low freight rates on grain from the entire western plains to the head of the lakes were at last secured.¹

It was thus the contributions to prairie agriculture of the period prior to 1900 in the way of adaptation of technique as well as in the laying of the foundations of the western grain trade and establishment of foreign markets that saw the phenomenal expansion of agriculture on the prairies in the period 1900-1920. Of almost equal significance was the "conjecture" of lower freight rates and rising world prices for wheat. In addition the trend to increased per capita productivity and increased comparative advantage of the Canadian over the American west acted favourably toward prairie agricultural expansion.

The rapid expansion of railway mileage played a large part in the rapid development of the prairies. In 1900 the total railway mileage in Manitoba amounted to 1,815 and in the Territories 1,901. This represented the main line of the Canadian Pacific westward, several short railway in Manitoba, and scarcely anything in the new provinces except lines from Regina to Prince Albert, and from Moose Jaw to the American boundary in Saskatchewan, and rail connections in Alberta with the main line of the Canadian Pacific Railway from Lethbridge, MacLeod, and Edmonton. Fourteen years later, railway mileage for Manitoba was 4,076, for Saskatchewan 5,089, and for Alberta 2,545, or a total for the three provinces of 11,710. All the main arteries had been constructed and, there remained only gaps here and there to be filled in in the railway net.² By 1931 the network of railways was such that areas

¹ Ibid., p. 44.

² MacGibbon, op. cit., p. 40.

beyond the "ten mile limit" were largely of low population density and not greatly productive.¹

From 1900 to 1930 the expansion associated with the establishment of the wheat economy was the central force in the Canadian economic life.² The expansion of industry in eastern Canada, and the consequent revolution of eastern agriculture was largely a result of the opening of the west after 1900. The development of the lumber industry in British Columbia and the development of coal mining and the iron and steel industry in the Maritimes were stimulated by the marked increase in the production of wheat.³ Paradoxical as it may seem, the creation of the wheat economy hastened rather than retarded the relative decline of agriculture which took place from Confederation to the present. 'The paradox is resolved if we realize that the servicing of a developing agricultural frontier is performed by urban communities, which provide facilities for marketing and assembly, for manufacturing and processing, for finance and transportation. Also, the increased mechanization of agricultural processes takes labourers off the farms, and in effect puts them to work in factories.'⁴ In 1871, ⁵ 80 per cent of Canadian population was rural. This proportion declined steadily until in 1941 it was 45 per cent. In 1881, 48 per cent of the population was gainfully employed in agriculture. In 1941 agricultural occupation in Canada accounted for only 25.2 per cent of the gainfully employed.

¹ W.A. Mackintosh, Prairie Settlement, The Geographic Setting, p. 55.

² V.C. Fowke, "Canadian Agriculture In The Post War World", Annals of American Academy Of Political Science, September 1947, p. 44.

³ H.A. Innis, Problems Of Staple Production In Canada (Toronto: The Ryerson Press, 1933), p. 100.

⁴ Fowke, op. cit., p. 45.

⁵ The approximate period when eastern agriculture was at its zenith.

The period 1900 to 1916 was one in which expansion both relatively and absolutely was the greatest. By 1916 the population of the Prairie Provinces had increased to 1,698,220 or by 305 per cent since the beginning of the century.¹ The number of homestead entries during this period has never been surpassed.² For the fiscal year ending March 31, 1914, Canada exported 129,426,579 bushels of wheat, 34,996,664 bushels of oats and 13,032,369 bushels of barley valued at \$137,612,623.³ In 1900 the total production of wheat had been 18,129,182 bushels.

The period 1900 to 1916 saw also the sequence of events leading to one of the perennial problems of the Canadian economy. Rapid development of a region such as the prairies involved the problem of acquiring the capital equipment necessary to promote rapid settlement and to maintain a relatively high standard of living.⁴ This involved the assumption of heavy fixed costs in the form of bonded indebtedness. By 1917 government commitment, dominion and provincial, for the construction of railways alone directly though not exclusively related to the settlement of western Canada amounted to some \$900 million dollars.⁵ The period of investment contributed to a pseudo-prosperity which

¹ Culliton, op. cit., p. 27.

² <u>Year</u>	<u>Number of Homestead Entries In The Prairie Provinces.</u>
1905	30,819
1906	42,012
1907	29,217
1908	38,119
1909	36,787
1910	48,023
1911	38,585
1912	35,226
1913	29,634
1914	24,726
1915	17,046
1916	12,304

as compiled from Annual Reports of Department of the Interior, Ibid., p. 27.

³ MacGibbon, op. cit., p. 42.

⁴ Mackintosh, Economic Problems Of The Prairie Provinces, p. 42.

⁵ Ibid., p. 39 from Report of the Royal Commission to Inquire into Railways and Transportation, No. 209, Sessional Papers of Canada, 1917.

encouraged the accumulation of public and private debt. "As long as capital is expended all the appearances of prosperity are present...There comes a time however when the inflow of capital dwindles. It may be that economic conditions external to the frontier dry up the sources of capital; it may be that the most desirable land has been all appropriated. The pioneer community faces a test. Either it must restrict its wants to those few products which the frontier itself can produce or it must produce a commodity which can reach the markets of the world."² In view of this irrevocable fact the high volume of investment associated with the development of the prairies in the period 1900-1930 is even more significant in its creation of long run problems for the Canadian economy because of the large proportion of foreign investment and the extreme variation in output of and/or demand for one of the major staples of production- wheat. In 1901 British and foreign investment in Canada was approximately 1.25 million dollars. By 1931 the total exceeded 7 billion dollars.² The warning signals were up as early as 1914. By 1913-14 Canada had to meet interest and dividend payments abroad of 128 million dollars but had a debit balance on all other current items of 280 million dollars. Both in that year were covered by a capital import.³ The test for western Canadian agriculture and the economy was postponed by the advent of World War I and its consequent dislocation of the European economy which focussed heavy demands on Canada's exports.

Early military events on the eastern front - the closing of the Dardanelles by Turkey in the Autumn of 1914 - cut off from western Europe the

¹ Mackintosh, op. cit., p. 4.

² Fowke, op. cit., p. 44.

³ Mackintosh, Economic Background Of Dominion Provincial Relations, p. 26.

largest single supply of export wheat of the pre-war period- the Russian supply. Russian exports of wheat which had averaged 166 million bushels annually in the crop years 1909-10 to 1913-14 had disappeared by 1917.¹ Average annual Rumanian and Bulgarian exports of 64 million bushels disappeared also. The allies came to rely for wheat almost entirely on overseas sources. Under the stimulus of war time demands and vaulting prices the prairie wheat economy expanded tremendously between 1915 and 1920.² Prairie wheat acreage increased from a pre-war figure of 10 million acres to 16.1 million acres in 1918 and 22.2 million in 1921, a peak not again reached until 1928.³

¹ M.W. Sharp, "Allied Wheat Buying In Relation To Canadian Marketing Policy 1914-18," Canadian Journal of Economics and Political Science, V. 6 (1940), pp. 374-5.

² V.C. Fowke, "The Economic Effects Of War On The Prairie Economy", Canadian Journal of Economics and Political Science, V. 11 (1945), pp. 372-74.

³ Ibid., p. 374 from A Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations, Canada 1937 Regina: 1937), p. 148.

Chapter V - PROBLEMS OF THE WHEAT ECONOMY

The expansion of the wheat acreage in response to the stimulus of World War I resulted in developments which were to appear first as a serious symptom in the early twenties and later in the thirties as an urgent and gigantic problem enveloping the prairie economy. This was the settlement of sub marginal land and semi arid areas and the incurring of private long and short term debts in a period of high prices. The appearance of a dry "cycle" of years and the downward trend of prices saw an ever increasing number of intra marginal units. The greatest expansion had taken place in the "pre-emption area"¹ - where "the railway companies had not seen fit to select the odd numbered sections as their land grants", and composing some 28 million acres extending from Moose Jaw on the east to near Calgary on the west, and from the international boundary line on the south to somewhere near the latitude of Battleford on the north.² These lands were thrown open to homestead entry or for sale by the Dominion government by the Dominion Lands Act of 1908.³

The problem as it developed is perhaps best described by Mr. N. McTaggart in the House of Commons representing Maple Creek constituency in the heart of the pre-emption area:⁴

In 1908 the Dominion Lands Act did not take cognizance that there were sections in that area [the pre-emption area] which were not as good as many other portions of the Canadian west. There were some areas which no doubt were of medium quality, some fairly good, and there were large areas where soil was absolutely unsuited to agriculture, being fit only for grazing...because there was no classification of lands made at that time settlers went on soils that were inferior...The demands for homesteads at that time was very great and all these lands were settled upon indiscriminately...After 1908 and prior to possibly 1916 or 1917 there was a period of marked prosperity.⁵ The years 1917

¹ See pages 44,45.

² Martin, Dominion Lands Policy, p. 333.

³ One purpose of the act was to put an end officially to the railway land grant system and to release "the great reservations...bu which provision was made for land grants to railways." Ibid., p. 418.

⁴ House Of Commons Debates (Ottawa: Kings Printer 1924), p. 312.

⁵ House Of Commons Debates (Ottawa: Kings Printer 1923), p. 1355.

1918 and 1919 were very dry years, and it was not until those years the fact became apparent that there were within that area many lands which were not adapted for tillage purposes...had there been in 1908 a classification of lands in southwestern Saskatchewan and southern Alberta, and had those lands which were not thought fit for tillage purposes been set aside and withdrawn from entry, we should not have the unfortunate conditions which we have in the southwest at the present time. The result has been a hardship on the settlers on the good soil within that area; because when the settlers on the poorer soils were compelled to move out they left a burden of taxation in the shape of school and municipal taxes...

A more detailed picture of the problems attributable to the settlement of unsuitable regions can best be obtained by focussing attention on a comparatively small area where the difficulties have been particularly acute. The territory known as the Tilley East Area lies between the Red Deer River on the north, the South Saskatchewan River on the south, the Alberta boundary on the east and on the west the line between range 10 and range 11 west of the fourth meridian. It comprises some 1,566,805 acres of brown prairie soil in a region of scanty rainfall.¹

By 1910 cereal farming had become quite general. Although early crops were not good, settlement continued, and at the peak there were some 2,400 resident farmers in the district. In 1915 and 1916 large crops were harvested and sold at high prices but since that time, with the exception of 1927 and 1928 harvests have been poor and in many years crops were not harvested. However in the meantime, land was broken, houses were built, municipalities formed, taxes levied and roads constructed, school districts organized and schools erected. Repeated crop failures and the exhaustion of private credit necessitated more and more relief. The situation became so serious that a commission was appointed in 1926 to enquire into conditions prevailing in the district.

¹ Synopsized from Appendix B, Mackintosh, Economic Problems Of The Prairie Provinces, pp. 291-4.

The commission found that there were 675,471 acres of alienated land from a total of 1,566,805 acres and that "a considerable percentage of land alienated from the Crown in the right of the Dominion of Canada," was "passing to the Crown in the right of the Province of Alberta through the failure of the owners...to pay taxes levied against their lands, and that the claims registered against such lands were far in excess of their value." There was an average "public" indebtedness of \$2 per acre. Additional indebtedness to private creditors such as banks, mortgage companies, implement companies, etc. averaged \$4 per acre.

Some 2,400 farmers were permitted to settle in an unsuitable area. Fifteen years after farming had become general 500 remained in the area. Public and private costs estimated at four million dollars had been incurred, or nearly with thousand dollars for each remaining resident farmer. The greater part of these costs cannot be recovered. This unfortunate experience (and many similar) may be attributed, in part, to the fact that, when this district was settled, the Dominion controlled the alienation of land, while the province was forced to assume a large proportion of the financial cost of necessary relief."

That the settlement of unsuitable lands had been general is indicated by the fact that in 1926 there were 19,000 abandoned or vacant farms in the prairie region or 7.7 per cent of the total farms, comprising slightly over 4 million acres or 4.5 per cent of the total occupied farm land.¹

Symptomatic problems of the prairie economy had appeared during the 'roaring twenties' even before the anchluss of falling world prices and the

¹ W.B. Hurd, Agriculture, Climate and Population of the Prairie Provinces of Canada (Ottawa: Published by authority of the Hon. H.H. Stevens, Minister of Trade & Commerce, Dominion Bureau of Statistics 1931) p. 78. It should be noted that in each of the three provinces unoccupied farms were for the most part a quarter section (160 acres) or less in area. This class accounted for 90 per cent of all abandoned farms in Manitoba, 76 per cent in Saskatchewan, and 67 per cent in Alberta. However "every abandoned farm emphasizes the necessity for care in the choice of land and expert direction for the new settler if successful settlement is to be effected", supra, p.78.

general drought of the thirties would mushroom those problems into near catastrophic proportions. To nearly the same extent that expansion of the wheat economy had been the dominant force in the Canadian economy, its near insuperable problems created by the calamitous coincidence of falling world prices and general drouth became, in fact, a national calamity.

The nature of the problem posed by general drouth was the condition which the Prairie Farm Rehabilitation Act of 1935 sought to alleviate. The terms of the act suggested that the problem was considered to be one of drought and soil deterioration, which might be successfully solved by the provision of water, methods of moisture conservation, soil drifting control, cultural practises, etc., without any substantial redistribution of resources.¹ In 1937 continued drought conditions led to amendment in respect to "land utilization" and "land settlement" and were a recognition of some need for redistribution of resources. Thus in 1938 the Report on Proceedings under the "PFRA" reported two main objectives of reclamation activities: "To re-establish crop production on land which has been abandoned due to drought, soil-drifting, or unsuitable cultural practises," and "to re-establish grass coverage on land which is demonstrably unfit for crop production by reason of inadequate precipitation or great susceptibility to drifting."²

The act applied to the "drouth area," Some idea of the gigantacy of the problem may be gathered from the area so specified. The area in 1938 (88½ million acres) on the basis of the 1931 census, included about 60% of the occupied acreage of the Prairie Provinces, and 65% of the cultivated land area. The farm population in 1931 was 536,585 persons or approximately 45% of the total farm population of the three provinces. In terms of acreage and

¹ A. Stewart, "The Prairie Farm Rehabilitation Programme," Canadian Journal of Economics and Political Science, V. 5 (1939), p. 314.

² Ibid., p. 316.

population roughly 60% of the area was in Saskatchewan, 30% in Alberta, and 10% in Manitoba.¹ In 1939 the area comprised 100 million acres of territory extending along the international boundary from the Red River to the Rocky Mountains, and reaching north to Brandon in Manitoba, the Quappelle River in eastern Saskatchewan, Battleford in western Saskatchewan, Wainwright in eastern Alberta, and a few miles north of Calgary in western Alberta.

As may be noted from Table III there was the insidious approach of the problem of overproduction of wheat during the twenties. The depression of the early twenties foreshadowed in the number of abandoned farms the problem to be faced by the prairie economy should the market for its staple decline. The drastic decline in wheat prices after the abolishment of the Wheat Board in 1919 led to intensive efforts to have the Board re-established for the crops of 1920, 1921, and 1922.² Under the Canadian Wheat Board of 1919-20 the entire crop of that year was marketed on a pooling basis through a federally created agency vested with monopoly powers, future trading being abolished on the Winnipeg Grain Exchange. The demand for the re-establishment of a Wheat Board gave substance to the indication of falling prices that there was something wrong with the grain trade. The Hyndman commission appointed in 1921 was instructed "to investigate and report upon the subject of handling and marketing grain in Canada". The Turgeon commission appointed in 1923 supplemented the Hyndman commission. The Stamp commission of 1931 was instructed to consider the single question "what effect, if any, the dealing in grain futures has upon the price received by producers." By 1936 the Honourable Mr. Justice Turgeon again headed

¹ data from Report on Proceedings under the Prairie Farm Rehabilitation Act, 1938, p. 31. Ibid., p. 314.

² V.C. Fowke, "Dominion Aids to Wheat Marketing", Canadian Journal of Economics and Political Science, V. 6 (1940), p. 392.

TABLE III #

ACREAGE, PRODUCTION, EXPORTS, AND CARRY-OVER OF WHEAT, 1922-1940 ^φ

Year	World				Canada			
	Acreage (millions)	Production † (in millions of bushels)	Exports ‡ ▲	Carry- Over ■	Acreage (millions)	Production † (in millions of bushels)	Exports ▲	Carry- Over ■
1922	234	3,204	718	621	22.4	399.8	279.4	22.1
1923	235	3,519	835	556	21.9	474.2	346.5	12.2
1924	228	3,127	779	683	22.1	262.1	192.7	48.1
1925	240	3,380	702	528	20.8	395.5	324.6	30.7
1926	243	3,494	852	615	22.9	407.1	292.9	40.1
1927	248	3,673	827	647	22.5	479.7	333.0	55.6
1928	264	3,996	946	697	24.1	566.7	407.6	91.2
1929	257	3,584	627	957	25.3	304.5	186.3	127.2
1930	266	3,847	838	915	24.9	420.7	258.7	126.6
1931	264	3,865	803	1,000	26.4	321.3	207.0	138.6
1932	269	3,865	631	999	27.2	443.1	264.3	135.9
1933	272	3,835	555	1,130	26.0	281.9	194.8	217.7
1934	265	3,543	541	1,199	24.0	275.8	165.8	202.0
1935	269	3,601	523	952	24.1	281.9	254.4	213.9
1936	276	3,584	607	776	25.6	219.2	195.2	127.4
1937	285	4,852	546	565	25.6	180.2	93.0	37.0
1938	293	4,605	647	628	25.9	360.0	167.0	24.5
1939	275	4,270	540	1,134	26.8	520.6	207.9	102.9
1940	266	4,082		1,357	28.7	551.4	208.1	300.7

^φ Data from Agricultural Branch, Dominion Bureau of Statistics, Ottawa.

† Excluding U.S.S.R. and China

▲ Including wheat flour

‡ For Crop Year beginning August 1

■ At beginning of crop year (August 1st)

▼ To June 30, 1941

Reproduced from Britnell, G.E. "The War and Canadian Wheat" Canadian Journal of Economics and Political Science, V. 7, (1941), p. 399.

a commission "to enquire into and report upon the subject of the production, buying, selling, holding, storing, transporting and exporting of Canadian grains and grain products."

Canadian governments, particularly those of the Dominion and the province of Saskatchewan responded to the persistent agrarian agitation of the inter-war years by investigating over and over again the problems of the pre-world War I years.

The point which was overlooked [and which even now must be emphasized] was that agricultural conditions in Canada after the first World War deferred fundamentally from those which characterized the early years of the century. Furthermore, this difference, while aggravated by war and by drought, was attributable to something far more serious even than a World War. The Canadian agricultural problem of the nineteen-twenties and nineteen-thirties was but a symptom of the cumulative and deep seated shrinkage in the rate of population growth and industrial expansion in the 'Atlantic community.' European governments, far from embracing economic nationalism and self-sufficiency either through perversity or ignorance, were driven to these desperate expedients by the contraction of economic horizons. Canadian agriculture in turn was faced with overseas markets which instead of steadily expanding now threatened permanently to contract.¹

From whatever angle one approached the Canadian agricultural problem of the inter-war years it was more acute, more elusive, and more discouraging than at any previous time. More than any other thing the wheat growers criticized the Winnipeg Grain Exchange with its organized speculation on the futures market. Intensive farm efforts to have the Wheat Board of 1919 re-established gave way to the wheat pool diversion. In a sense the pool period was an interlude in the drive for a national marketing agency. The drive for a 100 per cent compulsory pool was an attempt to convert the pools to this purpose.²

The pooling method differs from the "regular" grain marketing system

¹ Fowke, "Royal Commissions and Canadian Agricultural Policy," Canadian Journal of Economics and Political Science, V. 14 (1948), p. 172.

² Fowke, "Dominion Aids to Wheat Marketing," Canadian Journal of Economics and Political Science, V. 6 (1940), p. 392.

in three significant respects. It represents centralized rather than individual selling by producers. It involves payment to growers on a deferred but equalized basis, in contrast to outright cash payment at the time of the individual sale. It implies collective assumption by producers of the inevitable risks of market price fluctuations. Where conducted on a sufficiently inclusive scale and where expertly administered, pooling is potentially capable of mitigating seasonal price fluctuations through control over market movement. This substitution of collective risk taking for the hedging mechanism of the futures markets is the most significant feature of the pooling system.¹ On the whole, the hedging process has tended to narrow the margins which handlers of actual wheat find it necessary to take in buying and selling that commodity, thereby increasing the proportion of the ultimate price which farmers receive. The availability of this cheap insurance depends, however, upon the willingness and resources of an extensive body of outside speculators who are willing to pay for the privilege of absorbing the futures originating in hedging transactions. Such public and even professional participation is, however, both uncertain and volatile, tending to be unduly active when least needed for support, and to be lacking when most needed. Thus in 1924-5 and 1929 private speculative support was notably bullish, tending to carry prices to unwarranted heights,² and conspicuously absent in the period 1930-4.

The Winnipeg Grain Exchange, however, whether or not it was instrumental in creating or adding to the plight of the grain trade, was only a symbol. The real question at issue was the farmer's place in the price system, and whether he would submit to the pressure which this system now exerted towards

¹ H.S. Patton, "Canadian Wheat Policy Since The World War," Canadian Journal of Economics and Political Science, V. 3 (1937), p. 219.

² Ibid., p. 220.

retrenchment in the same way as he has accepted its pre-war incentives to expansion. The farmer thought that the state should intervene, and, whether he attacked the Grain Exchange, or urged the continuance of the Wheat Board, or advocated legislation to establish a 100 per cent compulsory wheat pool, his rebellion was against the same underlying condition, the pressure of a price system working relentlessly toward agricultural contraction.¹

This pressure of the price system was reflected in the decline of prices and the consequent shrinkage of gross cash income of farmers. In forty of the forty-eight months of the four crop years 1930-31 to 1933-4, the average monthly Winnipeg cash prices for 'number' one northern ranged below 70 cents, falling to as low as 42.4 cents for December 1932.² From 1928 to 1932 gross cash income of farmers fell 71 per cent. The sale of farm products in the Prairies fell from an annual average of 538.5 million dollars for the years 1926-9 to an annual average of 229.5 million for the years 1930-8. During the nineteen thirties the prairies had a net immigration of 103,440 or 63 per cent of the natural increase.³

The pressure, upon the farmers and upon the prairie economy as a whole, exerted by price system working relentlessly toward agricultural contraction was tremendously accentuated by the pyramid of public and private debt that had been accumulated during the period of expansion. Farm debt in 1931 was estimated ⁴ at approximately \$650,000,000 or more than \$11 per acre of improved land or nearly \$36 per acre of wheat. At 8 per cent the interest charge would be \$2 per acre of wheat or at the farm price of 1932 (30 cents) nearly seven bushels of the average yield of 15 bushels per acre. The average

¹ Fowke, "Royal Commission and Canadian Agricultural Policy," Canadian Journal of Economics and Political Science, V. 14 (1948), p. 172.

² Patton, op. cit., p. 230.

³ data from G.E. Britnell, "The War and Canadian Wheat," Canadian Journal of Economics and Political Science, V. 7 (1941), p. 411.

⁴ Mackintosh, Economic Problems of The Prairie Provinces, p. 259.

price per bushel for the years 1924-9 was well over \$1 per bushel and thus less than two bushels per acre would have met interest payments. This illustrates the extreme variation of the proportionate burden of servicing debt in an industry subject to uncontrollable fluctuations in output of and demand for a single major staple. Added to this was the burden, for the region as a whole, of provincial indebtedness of \$408 million and municipal indebtedness of \$230 million in 1931

The inevitable consequence of the anschluss of drought and falling prices was default of debt. In 1931 and 1932 Canadian life insurance companies incurred losses of \$4 million on farm loans in the Prairie Provinces.¹ In 1932, 62 per cent of the farm mortgages held by life insurance companies were in default. The wheat economy succumbed to the pressure of a price system working relentlessly to its contraction. Default of debt and heavy Dominion government expenditures on relief and reclamation placed the wheat economy of the prairies in a negative position in the economy as a whole. From the role of stimulator it had become a drag in the economy or so it seemed to taxpayers in other parts of Canada. It had however assumed such prominence that it threatened to drag the whole economy into the drag with itself.

It was thus that the Canadian Wheat Board was instituted in 1935 as a palliative to a long run fundamental problem. To western farmers and farm leaders it was only the inevitable, if somewhat delayed reconstitution of the Wheat Board of 1919. To the extent that it provides the benefits of the pooling system by acting "as a buffer between chaotic conditions in the international wheat market and the farmers on the land in western Canada,"²

¹ Mackintosh, op. cit., p. 266.

² Canada Year Book 1939, (Ottawa: 1939), pp. 569-80.

it is probably beneficial in its minimizing of short run fluctuations. It cannot however, reverse the downward trend of world prices that seem inevitable in an era of peace. If it is to realize the hopes of western farmers in facilitating a solution of their long run problems it must inevitably become an instrument of subsidization as well as, or rather than a marketing agency.

The principle of a minimum price for wheat may be regarded as in the interest not merely of the wheat industry itself: Where the economic condition of a region embracing approximately one quarter of the population is influenced primarily by the price of grains, the collapse of such values - particularly when aggravated by extensive crop failures - inevitably reacts upon the rest of the economy. The losses to creditors and investors in eastern Canada through provincial and federal arrangement for the adjustment of farm and municipal debts, the heavy federal expenditures for relief in the prairie provinces, and the tremendous shrinkage in sales and losses in credit collections of eastern manufacturers through paralysis of the purchasing power of western farmers have afforded an impressive demonstration of inter-regional inter-dependence.¹ Even though the implementing of a price guarantee may involve a direct government outlay, as in connection with the 1935 crop,² such financial loss would almost certainly be less disturbing to the national economy and be less severely felt, if spread through general taxation, than if the impact of non-compensatory prices were concentrated directly upon the western grain growing community, and thence transmitted to the rest of the nation through debt and tax default and impaired purchasing power on the part of the former.³

¹ the gross value of manufactures of agricultural implements shrank from \$40.6 million in 1929 to 5.3 million in 1933. Patton, op. cit., p. 230.

² As originally instituted the wheat board provided a minimum price of 87½ cents. It handled no wheat of the 1936 and 1937 crops since the market prices were above the minimum. The loss on the 1935 crop was \$11,860,000.

³ Patton, op. cit., p. 230.

While it is true that maintenance of agricultural income is an important prerequisite for a healthy economy, particularly in the case of the Canadian economy, the implementation of subsidies is not the simple remedy which it might at first appear. Since a subsidy reverses or alleviates the pressure of the price system working to contraction it is invariably implemented in most cases and in large degree in the interests of justice.

"The major premise", with which most of us would agree, is that the poor should be helped. However, the minor premise and the conclusion - farmers are poor, therefore farmers should be helped - are open to searching question. The truth is that some farmers are poor, and we might conclude from this that some farmers should be helped. But some miners and some garment workers and some retailers and some unemployed workders are also poor, while some farmers are by no means poor. Hence policy which is directed toward helping farmers on the ground that farmers are poor has no foundation in justice. It is unjust to help poor farmers when we do not help poor retailers, and it is unjust to help rich farmers... Rather it is that we should endeavour to assist agricultural poverty in its purpose, or rather, to find swifter and less painful ways of accomplishing this purpose. In other words, the economic answer to agricultural poverty is mobility: the easier the "flight out of agriculture", the less unattractive will agriculture have to be relative to industry in order to accomplish the object of the relative unattractiveness - to drive resources out of agriculture.¹

The necessity of the Wheat Board of 1935 as a palliative to the prairie economy was apparent. As a subsidizing agency on the grounds of justice its efficacy cannot be determined in view of the extreme variations in output from year to year, and from region to region in the prairies. To accomplish this purpose the subsidy must be sufficient to alleviate the situation of poor or inefficient producers who are poor in large part because of the unsuitability of climate or land. Thus as a subsidizing agency, the Wheat Board must in the long run aggravate the fundamental long run problem of overproduction

¹ K.E. Boulding, "Economic Analysis and Agricultural Policy, " Canadian Journal of Economics and Political Science, V. 13 (1947), pp. 439-441.

since it discourages withdrawel of resources from agriculture.

Table III shows the expansion of the wheat acreage after 1935. It was only the continuance of drought which resulted in the decline of the carryover. In 1939 the second largest crop in Canadian history immediately revived the carryover problem as may be noted from Table III. The outbreak of World War II prompted the belief that the problems of the grain trade would be absolved as in the first World War. Further expansion of the wheat acreage took place so that the large wheat crop of 1940 raised the carryover to unprecedented heights for both Canada and the world.

In British Columbia the fur companies, first the North-west Company and then the Hudson's Bay Company, were the pioneers of farming.¹

Dr. John McLoughlin, an official of the Hudson's Bay Company, was the great pioneer in agriculture. Through his efforts the Puget Sound agricultural Company, later to become an adjunct of the fur trading company, demonstrated by its success the agricultural potentialities of the Oregon territory which at that time included British Columbia. In 1837 a large farm produced fruit, grain, vegetables, and cheese. The farm was stocked with cattle, horses, sheep, goats, and swine. Three thousand acres of land were fenced it, and no less than thirty thousand bushels of grain and fourteen thousand bushels of potatoes were harvested. Two flour mills ground the wheat, and the flour and other products were shipped to Russian America and elsewhere. Other farms were established and usually supplied a local market provided by small industries such as brick-making, saw-milling, and flour-milling.

The demand for food created by the rush of miners² in the middle of the century provided the impetus for the development of ranching in such favoured locations as the Fraser River Valley 'where cattle fatten rapidly and whatever is sown grows well',³ and the Okanagan Thompson River Valley, and the Nicola, Lillooet and Caribou districts.

In British Columbia there were many obstacles to the development of agriculture. Most obstructive was the topography of the Cordilleran region which

¹ Shortt, op. cit., V.22, p. 527.

² Between March and June 1858, 20,000 people arrived in Victoria. Mary Q. Innis, An Economic History Of Canada (Toronto: Ryerson Press, 1935), p. 229.

³ Shortt, op. cit., p. 530.

is extremely irregular. There are certain large irregular areas to which certain physical characteristics belong, but within these areas conditions are not at all uniform. What might be true of the soil, climate, or adaptabilities of one region might not be true at all of another locality only a few miles distant. Until the expansive undertaking of the building of railways or highways, many fertile areas remained isolated from a market. Transportation has been the most important and most difficult problem presented in British Columbia. In the other provinces of Canada settlement rapidly advanced from central points and the occupied area grew as the frontier of the wilderness was pushed back. In British Columbia the mountain ranges prevented continuity of settlement. In addition, until the completion of the Canadian Pacific Railway in 1885 British Columbia could only be reached by a long sea voyage either round the Cape of Good Hope or Cape Horn.¹

It was thus that for a long time cattle ranching was the only farming practicable on a comparatively large scale in a mountainous country without communication other than that afforded by trails, very few roads, and water stretches. Here and there, some of the more enterprising ranchers grew wheat, beans, a little fruit and some vegetables, hay, etc., for local consumption mining camps, and local mining excitements, affording a limited market at profitable prices.² It was a condition governed almost wholly by the exigencies of demand, varying from year to year, or changing altogether with the shifting and haphazardness of placer mining. In most cases settlers bought as much land as possible and then sat down on it and waited for the coming of railways and population to make it profitable. This general situation mitigated against the early development of agriculture.

¹ Ibid., p. 530.

² R.E. Gosnell, The Year Book of British Columbia 1911 (Victoria: published by authority Legislative Assembly, British Columbia 1911), p. 231.

Railway development saw the subdivision of large ranches into orchards and small holdings.

The first break in this direction was made as 'far back as 1890', when Lord Aberdeen purchased the Coldstream ranch near Vernon and started planting fruit trees...The great majority of the large ranches have been sold for the purpose of subdivision, and the sidehills and tablelands, formed from volcanic ash and covered with bunch-grass, constituting cattle ranges, have been proved admirably adapted to fruit-growing, better indeed than the rich river bottoms; and the cattle have been disposed of to cattle dealers for the meat market. Everywhere orchards have sprung, or are springing, up and are visible where formerly were seen only bunches of cattle and horses, and this course is inevitably to be pursued, so far as irrigation is possible and shipping facilities are available, to the very limit of the bunch-grass region in every direction.¹

In the delta of the lower Fraser and on the southern end of Vancouver Island, and in sections of the Okanagan district, other conditions for the development of mixed farming existed from the outset, and the Westminister district and the Saanich peninsula remained the chief source of agricultural supply, apart from beef, for the coast cities, though these were never adequate to the requirements in any particular product. The open prairie land, which existed in small sections, produced hay and oats as the most profitable crops. Wheat and barley were only grown on the lower mainland for feed. In the Okanagan and Caribou districts wheat of excellent quality was grown. In the absence of extensive pasturage or forage in the woods, the dairy industry was not extensive.

The formation in 1890 by the British Columbia legislature of the agricultural department indicated that agriculture in that province had developed to the point where the government could divert attention from mining, lumbering, and fishing to consider its needs and potentialities.

Agriculture in British Columbia, as in Ontario, received a stimulus from the rapid and gigantic expansion of the wheat economy of the prairies. "The opening of the middle west and its settlement afforded the principal stimulus to fruit

¹ Ibid., p. 232.

growing on a commercial scale."¹ Great Britain, as well as the prairies afforded an outlet for the best varieties of apples. Districts as well as varieties became specialized. The Okanagan districts in the vicinity of Vernon, Kelowna, and Penticton specialized in apples. All types of fruits grew well in the West Kootenay district, from Revelstoke south, along the shores of the Arrow lakes, around Nelson, Procter, and Koslo, and on the shores of the Kootenay Lakes, and east of Kootenay Landing along the line of the Crows Nest Pass at Creston, etc.² The warm fruits - peaches, grapes, nectarines, mellons, and tomatoes - are very successfully grown in the Southern Okanagan and Similkameen and from Lytton as far east as Kamloops. On Southern Vancouver Island and on the islands, grapes and peaches are often grown. The high lands on the northern side of the lower Fraser River are especially well adapted to small fruits and from Agassiz east the district including Hope, Yale, North Bend and Spuzzum will grow cherries.

It was thus that the natural adaptability of the agricultural areas of the province made British Columbia essentially a fruit province insofar as exports were concerned. Other types of agricultural industry such as dairy-ing and grain growing were not extensive, as indicated by the budget speech of Finance Minister Ellison in 1910;³

"What in one sense is not, perhaps, so gratifying is that the imports of agricultural produce have been still greater than the home production and amount to \$14,962,904...It is regrettable, of course, that we do not supply more of the home consumption than we do, but, however, fast we may produce in view of the increasing population, it will be a long time yet before we can fully supply the home market, and in any event there will always be a very considerable amount of agricultural articles in one form or another that we shall import."

¹ Ibid., p. 235.

² Ibid., p. 235.

³ Ibid., p. 238.

Though fruit production has continued as a major export industry of British Columbia agriculture, dairy products have come to comprise a substantial proportion of the value of agricultural production. In 1947 the value of dairy products totalled \$25,588,000¹ out of a total cash income from the sale of farm products of \$92,679,000.² Lumbering, mining, and fisheries have continued to provide a market for dairy products. Improved transportation has facilitated the trend to specialized farming made possible and necessary by the topography and regional climatic variation found in the Cordilleran region.

As we have seen, the supply of crown lands in the fertile peninsula of Ontario had become exhausted in the decade before Confederation. The speculative boom in real estate had placed land beyond the reach of the average immigrant. In an attempt to maintain the flow of immigration and to minimize the comparative disadvantage of settlement in the Ottawa-Huron tract the "colonization road" was resorted to. Along roads built with state aid, free grants of fifty acres and the right to purchase 150 acres next to them were given. The first of these roads was the "Garafraxa" or Owen Sound road running from Fergus to Owen Sound and its success encouraged the government to build others. The Durham road from Lake Huron at Kincardine to the Garafraxa road was built in 1853 and in 1855 the Saugeen road from Elora to Southampton.³ The comparative success of these roads prompted the application of the same principle to roads built initially to aid lumbermen further east in the Ottawa-Huron tract. Five main roads ran north and south - the Hastings, the Addington, the Frontenac, the Bobcaygeon, and the Muskoka - and four running from east to west - the Mississippi, the Peterson, the Okeongo, and the "Pembroke and Matawan." These roads were

¹ Canada Year Book 1948-49 (Ottawa: 1949), p. 381.

² Ibid., p. 353. (subject to revision).

³ Jones, op. cit., p. 290.

systematically located over a wide area and enabled lumbermen who needed only good winter roads, to bring in supplies to the "Shanties" at lower cost than formerly.¹

The attempt to transform these roads into colonization roads by instituting free grants in some sections was part of the attempt to settle the Ottawa-Huron country. It was felt that "the vast amount of lumbering all along the Mada-waska and its tributaries will require more than the settlement can yield for years."² The scheme failed because of the character of the land where early government surveyors of the roads reported that in some areas "there was not enough soil to hold their stakes, and in others nothing but sand,"³ and because of the weakness of the shanty market. When the good timber was cut down or destroyed by fires and the lumbermen moved away, the pioneer was left stranded.⁴

Though the quality of the land was in general, poor, agriculture in isolated areas had been successful because of the prevailing high prices paid by the "shanty" market. The cutting of the roads made it possible to team in food-stuffs at comparatively low rates. This outside competition in their own market, and the recession of the lumbering industry itself meant that the thinly rooted colonization settlement could not prosper.⁵ The scheme on the whole was a failure and immigrants were numbered by the dozen rather than the expected thousands. By 1865, "in view of the general expectation that a very large area of fertile land...is shortly to be placed under the control and supervision of the Canadian legislature"⁶ attention was devoted to the territories of the

¹ Ibid., p. 291.

² Ibid., p. 293.

³ Ibid., p. 297.

⁴ In spite of this experience, new settlements of the kind associated with the lumber industry were continued in the country to the north known as "New Ontario."

⁵ Ibid., p. 298.

⁶ Ibid., p. 299.

Hudson's Bay Company in the northwest. The "colonization road" scheme was allowed to drag along. The unfortunate practise of grants or purchases being made merely to cut the timber continued and large areas were denuded of timber covering to contribute to future problems of conservation.¹

In areas left stranded by the receding of lumbering and the invasion of their limited market caused by the advent of rail and road, agriculture remained predominantly marginal. Until the tourist industry brought with it a new local summer market, the Ottawa-Huron areas was in large part one of low living standards and marginal agriculture.²

After Confederation the chief factor in agriculture in the fertile areas of Old Ontario was the growth of the home market. Reciprocity saw the diversification of product.³ This trend was continued under the stimulus of the expanding home market provided by the phenomenal development of agriculture in the prairies. The development of servicing industries and of manufacturing with the aid of tariff protection saw the growth of medium sized population centres such as Guelph, Brantford, London, and others, as well as the larger centres such as Montreal, Toronto, Hamilton. These provided an appreciable market for diversified agricultural produce. The continued growth of the American market, and after 1875 of the British market for livestock, and the development of the dairy industry were responsible for a large increase in the numbers of livestock kept.

During the eighteen sixties as wheat growing became even more unprofitable, fruit growing became more important in the southern peninsula. Apples were the most important single crop since they were grown nearly everywhere in the

¹ see footnote p. 81.

² Jones, op. cit., p. 303.

³ see p. 17.

provinces and shipped in considerable quantities to the British market as well as to other parts of Canada. Peaches and grapes were chiefly grown in the "Grimsby country," the narrow belt between the Niagara escarpment and Lake Ontario and stretching from Hamilton to the Niagara River. Some idea of the growth of fruit growing about 1880 and the size of the market is indicated by the following:

It has been roughly calculated that one thousand five hundred acres are under cultivation as peach-orchards in the Niagara district, the number of trees being three hundred and seventy-five thousand, and they produce a million baskets of fruit annually. Niagara, Stamford and Grimsby are the chief peach-growing townships. Every farm has a peach orchard; orchards of two thousand trees are common, and every year new orchards are planted and the yield increases...They [the baskets of fruit] are sent to the nearest railway station, where a "peach car" is always provided...Every day the platforms at the stations are crowded with piles of pink-covered peach baskets, in waiting for the trains which are to carry them to all the large towns in the Dominion - Halifax, and St. John included. The demand for this fruit far exceeds the supply...The baskets in which they are packed furnish a special industry, and the factories for making them are kept busy all the year round...Great quantities of this favourite fruit are preserved by canning and canning factories have been established in the district and at Toronto, which are doing considerable trade, domestic and foreign.¹

Grapes were an important product in the Grimsby country also, and catered to the domestic market. Plums were grown on a fairly large scale in the Owen Sound region.

Thus, by 1900 agriculture in Ontario had fairly well attained its present day pattern. From dependence on a single staple (wheat) product differentiation had developed occasioned by a growing domestic market, and necessitated by soil exhaustion and led to the improved farming methods associated with mixed farming. The typical landscape had lost its familiar backdrop of the primeval forest. By 1870 the disappearance of the forest had been so general that, comparatively speaking, the country had a naked look. Many farmers

¹ Grant, Picturesque Canada, pp. 391-3, 395, Jones op.cit., pp. 320-21.

lacked even a woodlot and were buying cordwood for their own use. Creeks which had once turned waterwheels were now dry throughout most of the year.¹ The general recourse to mixed farming and crop rotation, facilitated by an expanding domestic market, and comparatively congenial climate, has at one and the same time allowed soil conservation and farm income to go hand in hand in the supplantation of the grain trade in Ontario. It has been a much happier sequel than will have been the case in the prairies should world overproduction once again cast its shadow on the prairie grain trade. There the exigencies of climate and distance from markets of any appreciable size shall obviate any appreciable deviation from dependence on the wheat staple.

The situation as it prevailed prior to World War I with agriculture in Ontario is best described by C.C. James writing of the history of farming in 1910:²

It will thus be seen that during the past twenty-five years there has been a steady increase in the consumers of food products in Ontario and a slight decrease in the producers of the same. The surplus population of the farms has gone to the towns and cities of Ontario and to the western provinces. Now for a moment let us follow these people to the west. Many of them have gone on the land to produce wheat. Wheat for the European market has been their principal product, therefore they in turn have become consumers of large quantities of food that they do not produce themselves but must obtain from farmers elsewhere... From out of the Great West, therefore, there has come an increasing demand for many food products. Add to this the growing home market in Ontario, and keeping in mind that the West can grow wheat more

¹ In the 30,000 square miles of farm lands (19,200,000 acres) the average percentage of land under trees is now 15 per cent; Ontario Bureau of Statistics, A Conspectus of Ontario (Toronto: 1947), p. 35. The percentage of wooded land varies from 4 per cent in the highly cultivated regions to 20 per cent in some of the rougher areas. In nearly all cases there is a smaller percentage of land under woods than experience has shown to be necessary to ensure stable water conditions. In example, Grey County now has 14 per cent of its area under trees; the water supply now unstable and diminishing, was good twenty years ago, when woods covered 30 per cent of the total area. (Ibid). This inadequate ratio of forest to open lands may be taken as applicable to agricultural Ontario in general.

In two reports "The Natural Resources of King Township" and "Desiccation in Southern Ontario" it is shown that in an area of some 1400 square miles of highly regarded agricultural country between 80 and 85 per cent of once permanently flowing streams now dry up for a least part of a normal summer (Ibid., p. 34.

² Shortt, op. cit., V. 18, p. 577.

cheaply than Ontario, it will be understood why of recent years the Ontario farmer has been compelled to give up the production of wheat for export. His line of successful and profitable work has been in producing to supply the demands of his own growing home market, and the demands of the rapidly increasing people of the west, both rural and urban, and also to share in the insatiable market of Great Britain. Another element of more recent origin has been the small but very profitable market of Northern Ontario, where lumbering, mining, and railroad construction have been so active in the past five or six years.

Agriculture in Ontario, as in other sections of Canada, enjoyed unparalleled prosperity during World War I and underwent considerable expansion. The area under crop showed an average yearly increase of 98,812 acres in 1915-16-17 over the pre-war years of 1912-13-14.¹ The report of the Minister of Agriculture in 1915 stated that "the need of the largest possible production from the land was emphasized at every opportunity, including co-operation with the Federal Department of Agriculture in a special campaign along this line...farmers everywhere put forth their best efforts, not only in utilizing more land but also in adopting better methods."²

The dairy industry expanded greatly and in 1915 there were 998 cheese factories and 163 creameries having a total production of 21,320,000 lbs. Cattle, sheep, and swine production expanded as well as the acreage under Fall and Spring wheat.

Shortly after the war the Minister of Agriculture for Ontario reported that "the principal production in Ontario from now until devastated Europe regains normal conditions must be livestock rather than grain. This will be a profitable policy as there is little likelihood of the demand or prices, for livestock growing less for some years, while grain is sure to be cheaper."³

¹ J.C. Hopkins, The Province of Ontario In The War (Toronto: Warwick Bros. and Rutter Limited, 1919), p. 51.

² Ibid., p. 48.

³ Ibid., p. 65.

He reported also that while "it is true that the rural population is diminishing, the remarkable fact is that the production is at the same time increasing. Not the least factor in this has been the rapid adoption of improved machinery for farm work, notably the tractor."¹

During the period 1920-29 agriculture in Ontario declined absolutely and relatively contributing only 21 per cent of total net production in the province in 1929 compared with 31 per cent in 1920.² The relative decline was partly a corollary of the increase in industrial and pulp and paper production, and mining. Since 1911 the number of farms have continued to decrease, being 212,108 in that year, 192,174 in 1931 and 178,204 in 1941.³ As in other parts of Canada, farm income shrank during the great depression, falling from \$204.7 million in 1929 to \$61.4 million in 1932.⁴ The number of idle farms increased from 4,572 in 1931 comprising 574,547 acres to 5,563 farms in 1941 comprising 638,498 acres.⁵ Of these the greatest number were in northern Ontario. In southern and central Ontario there were actually fewer such farms in 1941 than in 1931.

Although the depression of the thirties saw Ontario agriculture in a period of retrogression it did not assume a negative position in the economy, as did prairie agriculture. Its dependence upon the public treasury for survival was smaller both absolutely and relatively. It was not so completely dependent upon foreign markets. The burden of farm debt was relatively less

¹ Ibid., p. 64.

² Mackintosh, Economic Background of Dominion Provincial Relations, p. 49.

³ Ontario Bureau of Statistics and Research, A Conspectus Of Ontario, p. 24.

⁴ Mackintosh, op. cit., p. 64.

⁵ A Conspectus Of Ontario, p. 24.

and there was not therefore, a prevalence of debt default. Differentiation of product allowed subsistence agriculture during a period of poor markets to survive with less aid from the public treasury than was required to alleviate the distress of prairie agriculture. In the period of revival Ontario agriculture was the first to benefit because of the proximity of a domestic market for much and many of its products.

For a decade or two after Confederation agriculture in the Maritime Provinces kept expanding. At the beginning of the eighties a trend toward specialization developed, but this was hindered by the topography of the Maritimes in many areas where the arable land is found only in small plots that are widely scattered. This gives rise to farms with small acreage of improved land, and frequently make it impossible to increase the arable acreage of the working units by the amalgamation of holdings. This obliges many farmers to obtain a part of their income from extra-farm operations, linking agriculture very closely to lumbering, fishing, and other activities.¹

As industries that had been an integral part of the rural economy moved to urban centres, rural population declined. In certain districts agriculture was ancillary to industries built up on a regional resource. When the resource became depleted, its associated industry ceased to exist, and agriculture in the area declined. A competition in grains and meats from newly developed parts of the continent increased, alternatives were found in orcharding, in the dairy industry, and in the more scientific cultivation of potatoes and other roots.

Livestock and animal products at present hold a key position in the

¹ Saunders, op. cit., pp. 59-62.

farm economy of each of the provinces. In every branch of livestock, Prince Edward Island surpasses Nova Scotia and New Brunswick in the average number of animals per farm. Apple production is far more important to Nova Scotia than to either New Brunswick or Prince Edward Island. Prince Edward Island and New Brunswick are more dependent upon the potato crop than is Nova Scotia. Apples and potatoes are the only agricultural commodities that are exported in large quantities from the Maritime provinces, although Prince Edward Island produces a surplus of poultry and dairy products.¹

In many agricultural commodities the Maritime provinces form a deficiency area. They have long been dependent upon outside sources for most of their wheat and wheat flour, and for some time the production of butter, cheese, eggs and meats have fallen far short of the total requirement of the region. This is a result of the topography of the region in spite of the fact that agriculture is the most important single industry engaging the largest percentage of the population.² The scattered farms and small scale of operations make it difficult to secure the adoption of improved agricultural practises, the maintenance of uniform standards, or economical marketing arrangements. The lack of readily available large urban markets has also been detrimental to the encouragement of agriculture on a highly commercialized scale in the Maritimes.³

¹ Ibid., p. 63.

² Percentages of all Gainfully Occupied in Agriculture (Saunders, op. cit., p.59.):

Prince Edward Island	57.1%
Nova Scotia	24.3%
New Brunswick	33.1%

In 1934 the percentage of the value of net production in agriculture to the total net value of production of each of the Maritime provinces was: Prince Edward Island 75.71; Nova Scotia 19.37; New Brunswick 24.48. (Ibid., p. 123.)

³ Dominion Bureau of Statistics, The Maritime Provinces in their Relation to the National Economy of Canada (Ottawa: 1948), p. 44.

Agriculture in the Maritimes is a mature industry. The more suitable farm lands have long since been settled, and the process of abandoning the less suitable areas has been carried far. In Prince Edward Island the highest number of occupied farms was recorded in 1891 at 14,549 but by 1941 the figure had been reduced to 12,230. In Nova Scotia a peak of 60,122 occupied farms was reached in 1891 and in 1941 only 32,977 occupied farms were reported. In New Brunswick, 38,577 occupied farms were reported in the census of 1891 and in 1941 the figure was 31,889. Farm acreages dropped in Prince Edward Island from 769,140 acres in 1911 to 737,400 acres in 1941; in Nova Scotia from 1,993,697 acres to 812,403 acres; in New Brunswick from 1,509,790 to 1,235,421 acres.¹ In the 1941 census, 48.2 per cent of the occupied farm acreage in Prince Edward Island, 49 per cent in Nova Scotia, and 49.2 per cent in New Brunswick were classified as "subsistence and combination of subsistence farms."

It has been customary to stress the importance of the role played by wheat in the agricultural structure and in the economic life of Canada. We have seen that, judged by its ability to return farm income, wheat growing was for long by far the most important single farm enterprise. As a result of the dominating relationship between wheat growing and immigration movements and railway construction, between wheat hauling and railway revenues² and between wheat exportation and the balancing of international payments, it was quite logical to regard the wheat situation as the best index of

¹ Ibid., p. 44.

² The Report of the Royal Grain Inquiry Commission 1938 (Ottawa:1938), p. 26 reports that 20 to 25 per cent of the revenue freight loaded on Canadian railways is made up of grain and grain products and livestock and notes that in depression there is only a slight contraction in the volume of farm products moving and thus acting as a stabilizer to the revenues of transportation interests.

economic well-being. The dire dilemma of the grain trade during the early thirties demonstrated that wheat cannot continue as an index of the well being of the Canadian economy. Other agricultural enterprises, as well as mining and manufacturing have continued their development. Among the former, dairying holds a prominent position. In its ability to supply farm revenue, dairying has easily surpassed all other enterprises save wheat growing and during the thirties steadily gained ground on the latter. Income from dairy products considerably exceeded that from wheat both in 1933 and 1934.¹ Dairying has long assumed a prominent position in British Columbia, Ontario, Quebec, and to a lesser extent in the Maritimes. A very commendable feature of the industry is the improbability of wide variations in income as a result of sudden or wide fluctuations in output. While income variation may result from price changes, there is not the same probability of variation in the output from the standpoint of the individual producer or region as in the case of dependence upon a single cash crop. Dairy production depends to a appreciable extent on the nature of the pasture crop which, because of its longer season of growth, is less dependent than most crops on weather conditions. Pasture is generally supplemented by various forage crops, and there is less likelihood of a general crop failure than of a failure of any single crop, and dairy production is dependent on the general rather than the special crop situation.

The dairy industry expanded in response to the growth of urban centres. Improved refrigeration and sanitary regulations hastened the development of a large scale fluid milk industry in regions suited to dairying and in relatively close proximity to urban centres. Urban expansion in Eastern Canada, and a

¹ H.A. Innis, The Dairy Industry In Canada (Toronto: Ryerson Press, 1937), p. 128.

higher standard of living resulted in increased demands for butter, for fluid milk and concentrated milk. Butter production increased from 36 million pounds in 1900 to 214 million pounds in 1934, while in 1931 the total consumption of milk was 13,817 million pounds,¹ of which 4,492 million was consumed as fluid milk. The consumption of milk, together with cream expressed as milk reached a total of 4,300 million in 1938.² The domestic consumption of all concentrated milk products was 71.0 per cent of the total production in 1938, of butter 95.9 per cent (356,797,062 pounds) and cheese 33.1 per cent (40,555,515 pounds) of the total production, indicating, the support for the dairy industry provided by the domestic market. That dairy products played a considerable role in supporting farm income during the thirties is indicated by the following:

TABLE IV

TOTAL VALUE OF THE DAIRY PRODUCTION OF CANADA 1930-38 #

	\$
1930	218,188,516
1931	192,825,064
1932	158,083,426
1933	162,476,580
1934	172,916,716
1935	180,756,423
1936	198,671,764
1937	215,623,262
1938	220,163,227

Canada Year Book 1940 (Ottawa: 1941), p. 218, consists of milk sold for domestic use valued at plants, and milk consumed and milk fed at farms.

Tables five and six demonstrate the relative position of agriculture in the provinces.

¹ Ibid., p. 263.

² Canada Year Book 1940 (Ottawa: 1941), p. 218.

TABLE V
TOTAL VALUE OF FARM PRODUCTS #
(thousands of dollars)

Province	1900	1910	1920	1930	1940
Ontario	196,980	307,801	502,931	336,089	329,873
Prince Edward Island	7,467	11,920	19,553	16,452	13,203
Nova Scotia	16,297	27,746	51,583	33,510	27,598
New Brunswick	12,888	23,657	48,308	30,927	28,168
Quebec	86,327	146,452	294,547	189,225	188,315
Manitoba	24,444	68,620	137,877	71,092	89,518
Saskatchewan	7,586	106,105	301,941	148,361	198,458
Alberta	5,803	48,543	187,556	116,839	180,481
British Columbia	6,646	19,472	36,361	38,128	36,995

A Conspectus Of Ontario, p. 224.

TABLE VI
AVERAGE GROSS VALUE OF PRODUCTS PER FARM #

Province	1930	1940
	\$	\$
Ontario	1,749	1,851
Prince Edward Island	1,279	1,079
Nova Scotia	850	837
New Brunswick	909	883
Quebec	1,392	1,217
Manitoba	1,312	1,543
Saskatchewan	1,087	1,431
Alberta	1,199	1,810
British Columbia	1,462	1,402

A Conspectus Of Ontario, p. 224.

Chapter VII - CANADIAN AGRICULTURE; WORLD WAR II AND THE POST-WAR PERIOD

With the outbreak of World War II it was expected that Canadian agriculture would benefit as it had during World War I. This proved to be true, but in a manner quite different from that of World War I. The expected similar demand for wheat faded with the capitulation of France and the Low Countries in the early summer of 1940, which meant the loss of the last continental market for Canadian wheat. As may be noted from Table III the world outlook for wheat in 1939 had been far from reassuring and the Canadian carryover had risen to over 100 million bushels. A large crop in 1939 created the prospect, at the beginning of the new crop year beginning in August, 1940, of adding a new wheat crop of 550 million bushels to a carryover of nearly 301 million bushels, 273 million of which was stored in Canada.¹ With an actual storage space for wheat and coarse grains of about 424 million bushels it was clear that to the financial problem of supporting the purchase of the 1940 crop would be added the difficult physical problem of providing storage. To meet this marketing crisis changes were made in the Canadian Wheat Board Act. Following the establishment of minimum trading levels on the Winnipeg Grain Exchange in 1940, elevator companies stopped buying wheat except on Wheat Board account. Larger producers found themselves deprived of a market for wheat. This was one step further toward actual government monopoly of the marketing of wheat.²

¹ G.E. Britnell, "The War and Canadian Wheat," Canadian Journal of Economics and Political Science (1941), p. 400.

² The Wheat Board Act of 1935 was not intended to establish the Wheat Board as a permanent method of marketing. It established a Board to deal with a condition existing. Partly because some contended that the Wheat Board is the proper method to market wheat permanently and partly because its continuance through 1938-39 resulted in a recreation of the condition which existed in 1935 the Wheat Board was continued under The Canadian Wheat Board Amendment Act, 1939. The setting of the amount of the advance for wheat was transferred from the Board to Acts of Parliament and thenceforth could only be changed by Parliament. The operation of the Act was extended to all parts of Canada where wheat is grown: Department of Agriculture Marketing Service, Agricultural Marketing Legislation 1939 (Ottawa:1939): Published by authority of the Hon. James G. Gardener, Minister of Agriculture, p. 8. In 1947 under further amendments, to the Act "no person other than the Board shall export from or import into Canada wheat or wheat products owned by a person other than the board." The board has taken over the marketing of Western oats and barley from August 1, 1949: Annual Progress and Programme Report to the Food and Agricultural Organization of the United Nations (FAO), Agriculture, Fisheries, Forestry, and Nutrition in Canada 1949 (Ottawa: Prepared by the Canadian inter-departmental FAO Committee, August 1949), p. 49.

In 1941 the Dominion announced its crop restriction plan for the new crop season.¹ The wheat policy for 1941 envisaged reductions in wheat acreage as high as 35 per cent of 1940 seedings.² Farmers were paid four dollars per acre for land diverted to summerfallow and two dollars per acre for land diverted to coarse grains or hay. Wheat acreage was reduced by 6.2 million acres or 22 per cent in 1941. By 1943 wheat acreage had been cut by 42 per cent.

TABLE VII[#]

ACREAGE OF SPECIFIED FIELD CROPS IN THE PRAIRIE PROVINCES 1939-44 ^ø
(in million acres)

<u>Acreages</u>	<u>1939</u>	<u>1940</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>
Wheat	25.81	27.75	21.55	20.65	16.09	22.44
Oats	8.23	7.81	9.30	9.67	11.79	10.45
Barley	3.6	3.62	4.88	6.41	7.9	6.76
Rye	1.01	.94	.99	1.25	.5	.57
Flaxseed	.30	.36	.94	1.47	2.92	1.3

^ø Quarterly Bulletin of Agricultural Statistics, October-December 1941, p. 249; October 1942-March 1944, p. 41; October-December 1944, p. 144.

[#] V.C. Fowke, "Economic Effects of the War on the Prairie Economy," Canadian Journal of Economics and Political Science (1945), p. 377.

Rather than the major demand on Canadian agriculture being for cereal products, as in World War I, a shift to meat and dairy products occurred because of the effective isolation of Britain from her pre-war sources of supply on the continent. War time agricultural policy thus worked in the

¹ House of Commons Debates 1941, pp. 1595-1601.

² V.C. Fowke, "Economic Effects of the War on the Prairie Economy," Canadian Journal of Economics and Political Science (1945), p. 377.

direction of transforming as much as possible of the prairie wheat economy into coarse grains and livestock. The effect on sources of prairie farm cash income can be discerned from Table VIII.

TABLE VIII

CASH INCOME FROM THE SALE OF FARM PRODUCTS IN THE PRAIRIE PROVINCES¹
(in Millions of dollars)#

	1928	1932	1939	1940	1941	1942	1943	1944
Grains, seed,								
hay	504.6	121.89	231.33	201.08	200.86	200.13	358.35	579.17
Wheat	440.73	111.16	213.72	182.66	168.1	138.13	203.02	431.4
Oats	22.87	5.43	6.58	7.6	10.38	20.17	61.1	58.66
Barley	25.19	2.7	6.79	5.45	10.73	20.47	55.02	60.65
Rye	8.79	.43	1.99	1.43	2.7	1.86	5.33	5.26
Flax	6.05	.98	1.99	2.37	5.76	21.82	30.98	18.63
Livestock	67.49	24.2	65.59	96.0	126.45	177.78	235.98	299.12
Cattle	42.13	10.6	34.65	42.0	52.84	68.57	76.29	95.68
Hogs	21.96	11.92	27.28	43.24	63.1	92.14	132.57	172.27
Dairy Products	21.47	13.05	21.64	23.42	36.5	47.96	54.2	57.45
Eggs, Wool,								
Honey	9.22	3.55	5.90	7.5	9.46	16.01	26.16	28.74
Total Cash								
Income All								
Products ²	611.78	168.55	335.00	339.4	392.07	462.12	693.87	985.86
Government								
Payments ³			10.0	6.7	50.00	54.96	31.99	65.28

Sources: National Income, Appendix 4 to the Report of The Royal Commission on Dominion Provincial Relations (Ottawa:1939); National Income 1937-1940: Dominion Provincial Conference 1941 (Ottawa:1941); Cash Income from the Sale of Farm Products (Ottawa: February 11, 1944 and February 25, 1945)

In Table VIII the years 1928 and 1932 are taken as representing respectively the peak of the nineteen-twenties and the trough of the early nineteen-thirties.

¹ Reproduced from Ibid., p. 378.

² Not enumerated but included in the total are such items as vegetables, sugar, beets, corn, clover, fur farm products, and forest products sold off farms.

³ Made up of payments under the Prairie Farm Assistance Act, the Prairie Farm Income Act, the Wheat Acreage Reduction Act and payments on wheat participation certificates.

The 1923 figure of 611.78 dollars was first surpassed in 1943 with a figure of 693.87 million. It will be noted that this occurred with a continued substantial reduction in income derived from the sale of wheat and increase in meat and dairy products. While total cash income trebled in the period 1939 to 1944, only in 1944 was income from the sale of wheat as large absolutely as in 1939. In 1939 wheat was responsible for 63 per cent of cash proceeds, 30 per cent in 1942 and 44.1 per cent in 1944. Livestock provided 19.6 per cent in 1939, 38.5 per cent in 1942 and 31 per cent in 1944. This would seem to suggest that the prairie economy is capable of product differentiation in agriculture, and that this capability should enable it to relieve itself of the vicissitudes associated with dependence upon a single staple.

Unfortunately, the change in prairie agriculture during the war was not fundamental. The mixed farming which was developed during the war was not self-sufficient farming. The whole structure remained a cash income structure and as highly dependent upon foreign markets as was the wheat economy at any time. Prairie farmers produced a wider variety of product, but relied as heavily on retail markets as when nearly completely specialized in wheat. The change was a producers response to changing cost price relationships and has persisted or reverted depending on the course of those cost price relationships.¹

It should be noted that, on the whole, the pattern of agriculture in the Dominion emerged against the backdrop of a prairie economy specialized in wheat. Industries and population centres servicing the wheat economy provided a market for the meat, dairy, and other products of agriculture in other parts of Canada. The prosperity of the wheat economy was instrumental in the

¹ Ibid., p. 386.

prosperity of agriculture in other parts of Canada. In the absence of foreign markets for meat and dairy products, extensive mixed farming on the prairies, to be successful, must compete on the domestic market with agriculture in other parts of Canada and so increase their problems. In view of the general comparative disadvantage of the prairies it is doubtful if mixed farming there could compete either on the domestic or foreign market after normal cost-price relationships have been established.

One very significant development during World War II was the notable reduction of farm debt in the prairies. A survey by the Dominion Mortgage and Investment Association showed a reduction between 1937 and 1945 of 60 per cent in the amount owing on mortgages and agreements for sale. Since farmers are likely to liquidate current indebtedness before long-term indebtedness, it is probable that total farm debt in the Prairie Provinces declined at least in that proportion. The result has been a substantial reduction in the yearly burden of interest payments from \$35 million in 1938 to less than \$15.5 million in 1945. In the rest of Canada debt charges declined over the same period from some \$21 millions to about \$14.5 million.¹

Altogether, agricultural subsidies paid by the Dominion government rose from \$33 million in 1941 to \$96.3 million in 1944 and \$84.1 million in 1945. In this expenditure wheat acreage reduction was the major item in the first three years, butter and field grain assistance thereafter.

¹ Monthly Review The Bank of Nova Scotia, Agriculture in the Transition Period, November, 1946.

TABLE IX #

AGRICULTURAL SUBSIDIES PAID BY THE DOMINION GOVERNMENT ^φ
 (millions of dollars)

66

<u>Subsidy</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>	<u>1945</u>
Fluid Milk	-	3.8	5.0	12.8	12.7
Butterfat	-	7.0	15.7	24.2	23.7
Milk for concentration	-	-	.5	2.1	1.9
Milk for cheese	-	-	.8	4.3	4.3
Other cheese bonuses	3.6	1.9	1.5	1.7	1.7
Hog premiums	-	-	-	14.1	10.7
Feed freight assistance	2.1	9.8	15.9	14.6	16.4
Feed wheat drawback	-	.3	2.2	7.7	6.6
Feed storage assistance	-	-	1.2	.9	.9
Wheat acreage reduction	22.4	22.8	31.0	9.0	.8
Prairie farm income	.9	18.0	.1	-	-
Apples	1.7	2.3	1.8	1.0	.4
Canning crops and					
Berries for jam	-	-	1.3	3.0	2.8
Miscellaneous	2.3	1.9	1.4	.9	1.2
Total	33.0	67.8	78.4	96.3	84.1

Monthly Review The Bank of Nova Scotia, November 1946.

φ Source: Department of Agriculture.

The most striking development in Canadian agriculture during the war was the extraordinary expansion in the production of livestock and dairy products. As compared with the 1935-39 average, production of pork and concentrated milk more than doubled, while beef, cheese and egg output increased by upwards of 50 per cent and that of creamery butter by roughly 20 per cent. The peak of butter production, however, was passed in 1943, that of pork in 1944, and that of beef in 1945. By 1946, retrogression towards pre-war output levels of livestock and dairy products and of feed, grains had proceeded a considerable distance. The chief reason for this trend was the return of prairie agriculture to specialization in wheat caused by the rise in wheat

prices under the influence of soaring United States prices.¹

In contrast to World War I, World War II saw Canadian agriculture achieve a better balance than ever before. The very large gain in farm income was attributable in large part to the increase in livestock and dairy production. The absorption of this substantially large volume of production attained during the war presented no problem during the immediate post-war years. Under the United Kingdom contract, the British government agreed to buy 600 million bushels over the four year period 1946-1950² at a fixed price of \$1.55 per bushel in 1946 and 1947, with floors of \$1.25 and \$1.00 in 1949 and 1950 respectively. The bacon contract with Britain assured a market until the end of 1948. The increased per capita income during the war resulted in increased per capita consumption of agricultural produce, which if it can be maintained, will contribute to the absorption of increased agricultural production. Consumption of dairy products, excluding butter, of meat and eggs increased during the war approximately 20 per cent and that of fresh fruits and vegetable approximately 40 per cent.³

In anticipation of market instability the Dominion Government in 1944 inaugurated the Agricultural Prices Support Board under authority of the Agricultural Prices Support Act. The broad objective to be pursued by the Board is stated in the following quotation from the Act:⁴

In prescribing prices...the Board shall endeavour to ensure adequate and stable returns for agriculture by promoting orderly adjustment from war to peace conditions and shall endeavour to secure a fair relationship between the returns from agriculture and those from other occupations.

1 At the end of July 1946, the government raised the guaranteed price from \$1.25 per bushel for No. 1 northern at the Lakehead to \$1.35 retroactive to August 1, 1945, and removed the ceiling of \$1.55 from all overseas sales except those to the United Kingdom with the result that, for a time, the price on non contract sales rose to \$2.18: *Ibid.*

2 Nearly double the average quantity taken by Britain in periods of similar length between 1925 and World War II.

3 Monthly Review of Bank of Nova Scotia, November, 1947.

4 Report of the Minister of Agriculture for the Dominion, 1946 (Ottawa:1946), p. 210.

The authorized methods of price support are the purchase and sale of any agricultural product, excepting wheat, and the making of deficiency payments, equal to the amount by which the average price of a product falls below the prescribed price during a specified period.

In 1949 the Agricultural Prices Support Board was extended for an indefinite period¹ in view of the deterioration of overseas markets for all types of agricultural produce exported by Canada. The account of the price support given Nova Scotia apples in the Report of the Minister for 1949 is indicative of the problems which in all probability shall in future confront the Board proportionately to the decline of overseas markets:²

The end of the fiscal year 1947-48 found the Board in possession of a considerable quantity of processed apples which had been acquired under the support programme for the Nova Scotia apple crop of 1947. They could not have been sold in Canada except at prices which would have spoiled the market for producers in other provinces, and foreign buyers could be found for only part of the supply. Distribution of a portion of the stocks, therefore, was made to the Department of Veteran's Affairs and other Government services and to institutions such as hospitals the receiver paying the cost of distribution only. The remaining stock, consisting of some 187,000 cases of apple sauce, was given to the British Ministry of Food, which paid the cost of inland and ocean transportation to the United Kingdom. The total cost to the Board of the Nova Scotia apples programme was \$3,119,274.

The situation in 1948 was not unlike that of 1947 except that the crop was lighter (743,755 bbl, as compared with 1,210,454 bbl.). This was due to the Government sponsored programme for the removal of trees bearing the less marketable varieties and to unsatisfactory growing conditions. In order to prevent a glut on Canadian markets and to enable the growers to continue to maintain their orchards, assistance was again granted under the Agricultural Prices Support Act.

It would seem that, in the above fashion the Agricultural Prices Support Board promises to become an instrument for the subsidization of agricultural products other than wheat.

Census statistics show that more than one-half of the full-time farms

¹ Report of the Minister of Agriculture for the Dominion 1949 (Ottawa:1949), p. 256.

² The Agricultural Products Act, 1949, transferred from the Dairy Products Board to the Agricultural Prices Support Board the purchase of butter for price support purposes.

in Quebec and the Maritime Provinces are classed as subsistence or combination of subsistence farms.¹ It is to be hoped that this fact will be taken cognizance of in the administration of the Agricultural Prices Support Board for the securing of "a fair relationship between the returns from agriculture and those from other occupations." Should 'subsistence' and 'combination of subsistence' farms become the standard of comparison in the support of farm income by means of transfer payments tied to the price of farm products it seems likely that a serious financial burden will ensue, as well as a severe aggravation of the problem of marketing.

The object of the Agricultural Prices Support Board to "endeavour to ensure adequate and stable returns for agriculture by promoting an orderly adjustment from war-time to peace conditions" was warranted. The expansion of Canadian agriculture in response to the inelastic demand of war-time certainly justified recourse to the public purse in facilitating an orderly hoped for adjustment of production to a level commensurate with the demand and accompanying price structure of peace time. The endeavour to secure "a fair relation between the return from agriculture and from other occupations" raises firstly the question as to what should be the standard of comparison in regard to the individual unit, and secondly, how extensive should be the recourse to the public purse in maintaining a war-expanded agricultural output. The subsidization of an industry by price support of its products would not seem conducive to the shifting of resources out of that industry. If, in

¹ The census definition of a subsistence farm is as follows: "Farms on which the value of products consumed or used by the farm household amounted to 50 per cent or more of the gross farm revenue were classed as subsistence. 'Combination of Subsistence Farms' are farms where the value of products used or consumed and the revenue from another main type, such as poultry, livestock, etc. were required to form 50 per cent or more of the gross farm revenue."

this fashion, agricultural production is to be maintained on its presently war-expanded scale it seems, insofar as it may be presently determined, the Agricultural Prices Support Board - an emergency institution conceived to meet what was regarded at the time of its conception as a temporary problem - shall as in the case of the Canadian Wheat Board, become a permanent feature of Canadian agriculture. Should it come to monopolize the marketing of agricultoreal products other than wheat as competely as the Canadian Wheat Board monopolizes the marketing of the products of the grain trade then the Canadian economy, in view of the prominence of agriculture in it, will be considerably subjected to the repercussions of the administration of the two boards.

Chapter VIII - CONCLUSION

We have seen that rather than the Canadian economy being predominantly agricultural, it is an economy in which one of its predominant industries is agriculture.¹ Agriculture remains a very important factor in the Canadian economy. The purchasing power of the farmer is a decided influence in providing manufacturing, transportation, and distribution interests with employment and revenues. The net farm income from farm production, including wheat participation payments, was \$1.7 billion or 13.6 per cent of the national income in 1948 and \$1.2 billion or 11.3 per cent of the national income in 1947.

Though agriculture in the Canadian economy is to an increasing extent becoming less prominent, the expansion of other primary industries and of secondary and tertiary industries has not been at the expense of agriculture, but their rate of progress having been very much greater. In the period 1939-45 the net value of production in manufacturing increased 167 per cent, the number of employees 92 per cent and the payroll 160 per cent.² Thus while agriculture remains of great importance in absolute terms, its output has decreased relative to that of secondary industry. In 1919 the total net value of commodity production was \$5.3 billion. Agriculture accounted for 44 per cent of this and manufacturing for 33 per cent. In 1939, out of a total of \$5.1 billion, agriculture contributed only 23 per cent compared with 40 per cent for manufacturing.

¹ Out of exports in 1949 having a total dollar value of \$3,0225 million (including re-exports of foreign goods valued at \$29.5 million) agricultural and vegetable products comprised \$773.0 million and animals and animal products \$338.4 Million; Exports of wood, wood products and paper totalled \$875.3 million. Canadian Statistical Review, February, 1950. Ottawa: Dominion Bureau of Statistics, pp.57 1950.

² Annual Progress and Program Report to the Food and Agriculture Organization of the United Nations (FAO) op. cit., p. 3.

³ Figures from a study issued by the Dominion Department of Reconstruction in 1945, Ibid.

By 1948, when the total was \$6.3 billion, the share of agriculture had dropped to 20 per cent while manufacturing had expanded to provide 54 per cent. In 1947 the agricultural proportion was almost 21 per cent.

In trade too, although the export of agricultural products has been maintained the proportion has dropped from almost one-half of total exports in 1930 to about one-third in the post-war period.¹

Agriculture in the Maritimes developed and remains ancillary to fishing, lumbering and until the advent of iron and steam, shipbuilding. After that, mining and manufacturing provided a limited market for agriculture. In Quebec agriculture has been important chiefly in support of an economy of a more self-sufficient nature containing relatively low per capita income. In British Columbia agriculture developed in spite of the adversities of topography in support of lumbering, mining, and fishing, and to a limited extent after the opening of the Panama Canal, commerce. Ontario agriculture originated, as in other parts of Canada with the exception of the prairies, ancillary to other industries - first the fur trade, then lumbering, and after that, the commerce of the St. Lawrence. With the growth of the grain trade agriculture in Ontario became for a time, the predominant industry contributing to the well being of that part of Canada. With the eclipse of its grain trade by the prairie economy, Ontario agriculture had natural recourse to mixed farming and in effect reverted in large part to its former role of provisioner in supplying a growing domestic market associated with expanding secondary and tertiary industries, as well as those of mining and lumbering. Ontario agriculture continues to play a very large and important part in the economy of the province.

Prairie agriculture originated, developed, and after 1930, foundered as a commercial venture in the production of the wheat staple. It could be

¹ Ibid., p. 3.

said that whereas in other parts of Canada agriculture was important chiefly as a provisioner of contiguous industries, prairie agriculture developed the commercial potentialities of the wheat staple to the point where it, in fact, became important to the entire economy of Canada. We have seen that the fundamental problem of world overproduction of wheat has reduced prairie agriculture's commercial potential but not its predominance in the economy. Not being complemented by other industries of a size sufficient to provide a market for the products of such a diversified agriculture as may be possible in the prairie region, it seems that prairie agriculture will pose a perennial problem for the Canadian economy in the marketing of its main product.

Adding to the seemingly inevitable recurrence of marketing problems for the prairie economy is the ever present possibility of a recurrence of a 'dry cycle' with the associated problems for the entire economy of Canada. In this respect, the prospect does not seem too cheerful.

In the absence of a good crop since 1942, the issue of migration or irrigation has again come to the fore; with the advent of another crop season the whole settlement programme presses for consideration and action. The problem overclouds the whole western business picture and concerns the very warp and woof of the economic fibre of the nation.¹

The drought conditions prevailing in the 1949 season were described as the "second worst" experienced by the prairies since 1939. It was estimated that 70,000 farms were drought stricken - affecting about one-third of the prairie farms with the most severe conditions in the southern dry areas of Saskatchewan and Alberta. The millions paid out under the Prairie Farm

¹ The Canadian Banker, Winter 1950, Journal of the Canadian Bankers Association (Toronto), p. 79.

Assistance Act¹ merely alleviated the current situation, leaving the basic problem still to be solved.

The abandonment of the dry areas in the face of a new drought threat is not to be given serious consideration. That course was more reasonable when the population was smaller, when other acreage in more favoured areas was available and when the benefit of irrigation were less understood. The soil of the so-called dry areas is so rich and attractive from a farming or grain-growing standpoint that irrigation on a large scale seems to be the practical answer. The capital investment already made in land and in both public and private facilities - apart from the broader economic considerations already mentioned - is a dominating factor. Railroads, highways, farm buildings, villages, towns, and other developments, representing many millions, cannot be moved without irreparable loss.²

¹ The Prairie Farm Assistance Act, passed in 1939, provides for direct money payments by the Dominion on an acreage basis, to farmers in areas of low crop yields within the spring wheat area. The Act provides for two types of payment - emergency year assistance and crop failure assistance. An emergency year may be declared by the Governor in Council in any year when the average price of wheat is less than 80 cents per bushel and awards are then payable in townships in which the average yield of wheat is 12 bushels to the acre or less. When a certain number of townships in a province have an average yield of wheat of 5 bushels to the acre or less, the crop failure assistance, which is at a higher rate, may be authorized to be paid in such townships instead of the emergency year assistance. The individual award under either type of assistance is payable on one-half the farmers cultivated acreage - up to a maximum of 200 acres on a farm with 400 cultivated acres or more - and under crop failure assistance a minimum of \$200 is payable on each farm. In August 1940, the Act was amended. A board of Review was set up to determine the eligibility of all townships for which applications might be made and to decide questions as to the eligibility of any farmer or class of farmers; Report of the Minister of Agriculture for the Dominion of Canada 1941, (Ottawa: 1941), pp. 161-162.

Most of the money to cover crop failure assistance was "notwithstanding the provisions of the Canada Grain Act" to come from "a levy of one per centum deducted from the purchase price of all grains and transferred to the Board of Grain Commissioners" (4 Geo. VI, Chapt. 38, Sec. 13(1)) When this fund is insufficient to pay awards under the Act, the Minister of Finance will authorize that the deficiency be paid out of the consolidated revenue fund; Agricultural Marketing Legislation 1939 (Ottawa: Department of Agriculture Marketing Service, 1939), p. 11. Since 1939 total payments under the Act have amounted to \$104,606,488 while total collections from the one per cent levy on grain marketed from 1939 to the end of March 1949 amounted to \$58,634,389; Report of the Minister of Agriculture for the Dominion of Canada 1949 (Ottawa: 1949), p. 255.

² The Canadian Banker Winter 1950, p. 80

While this may be true it should be noted that irrigation of certain areas is possible at tremendous cost, and can at best effect a comparatively small part of the 'dry area'. Livestock and dairying are the natural complement of irrigation. As before demonstrated any large scale development of livestock and dairying in the prairies can but add to the problems of agriculture in other parts of the Dominion.

In view of the above considerations it does not seem likely that the overall pattern of Canadian agriculture will greatly change in the foreseeable future. Recent resource discoveries, in the Alberta oilfields and of Ungava iron ore deposits, would seem to lend validity to the assumption that the decreasing relative prominence of agriculture in the economy will continue. In this respect the probable continued specialization of the prairie region in wheat production will, in its problems associated with near complete dependence on foreign markets and the vagaries of the prairie climate, be a relatively smaller problem (and burden) for the economy as a whole. In this, the amortization of prairie farm debt during World War II will have a favourable influence in any future period of collapsed world prices for wheat or in any period of serious general drought.

In the development of the prairie region the insistence upon the 'all Canadian' routing of the Canadian Pacific railway added to the hazards of the conquest of the frontier, and contributed to the false start of the eighties. This two-decade delay in the development of the Canadian west saw the onslaught of the depression of 1913-14 before any amortization of capital investment and consequent reduction of interest obligations could be made. World War I postponed the crisis and, in fact, added to the magnitude of the future problem by encouraging further expansion of the wheat economy. The crisis of the early

twenties portended the nature of the problems to be faced by the prairie economy, which, aggravated by a general prolonged drought, became the pre-occupying problem of the entire economy in the thirties.

World War II fully rejuvenated Canadian agriculture and left it, as a result of the pronounced progress in amortization of farm debt, in a comparatively less vulnerable financial position, particularly in regard to prairie agriculture. It can be seen, however, that on the whole Canadian agriculture remains dependent upon foreign markets for any prolonged period of well being. Subsidies through the medium of the Wheat Board and the Price Support Board can only postpone the facing of reality.

Of direct concern to Canadian agriculture is the infamous 'dollar problem'. Though there may be inelastic world demand for agricultural produce the reduction in the effective demand for Canadian output arising from the exigencies of the dollar problem threatens to become catastrophic for the immediate future of Canadian agriculture. The post-war trade boom, chiefly with the United Kingdom, was made possible by dollar credits supplied by Canada and the United States, amounting to \$8.6 billion for the four year period ending with 1949 of which Canada supplied \$1.1 billion.¹ The decision of Canada to limit her participation in Britain's recovery programme to convertible sterling seriously crimped Canada's self-fabricated trade boom. The ensuing termination of Marshall Plan assistance poses for Canada, and particularly for Canadian agriculture, an ominous problem.

Is it realistic to pin to an apex of the traditional trade triangle all hopes for the eventual solution of the problems facing the Canadian economy? Perhaps in the long run there would be a greater possibility of mitigating the

¹ Canadian Banker, Winter 1950, p. 69.

fluctuations in agricultural income by an attempt to develop the potentialities for trade in agricultural surpluses latent in dense and growing population areas such as India, Pakistan, Burma and China. If not, then there would seem to be but one permanent solution of what must be perennial problems of the Canadian economy posed by agriculture and this is subsidization of the shifting of resources out of the industry rather than subsidization of its products which, in many cases, has accentuated the problems by encouraging expansion rather than contraction. Complementary to this solution would be the need for a revision of the present immigration policy since the shift of resources out of agriculture would create within Canadian shores a "displaced persons" problem of considerable magnitude comprised of native Canadians.

BIBLIOGRAPHY

A Books

- Clarke, S.D. The Canadian Manufacturer's Association. Toronto: University of Toronto Press, 1939.
- Creighton, D.G. The Commercial Empire of the St. Lawrence. Toronto: The Ryerson Press, 1937.
- Oulliton, J.T. Assisted Emigration and Land Settlement. McGill University Economic Studies Number 9, Montreal: The Federated Press Limited for the Department of Economics and Political Science, McGill University, 1928.
- Day, C. Pioneers of the Eastern Townships. Montreal: John Lovell, 1869.
- Fowke, V.C. Canadian Agricultural Policy. Toronto: University of Toronto Press, 1946.
- Gosnell, R.E. The Year Book of British Columbia 1911. Victoria: published by authority Legislative Assembly, British Columbia, 1911.
- Hopkins, J.D. The Province of Ontario In The War. Toronto: Warwick Brothers and Rutter Limited, 1919.
- Howison, John. Sketches of Upper Canada. Edinburgh: Oliver and Boyd, 1825.
- Innis, H.A. Problems of Staple Production In Canada. Toronto: The Ryerson Press, 1933.
- Innis, H.A. (editor). The Dairy Industry In Canada. Toronto: The Ryerson Press, 1937.
- Innis, H.A. and Lower, A.R.M. (editors). Select Documents In Canadian Economic History, 1783-1885. Toronto: University of Toronto Press, 1937.
- Innis, H.A. and Plumptre, A.F.W. (editors). The Canadian Economy and Its Problems. Toronto: The Canadian Institute of International Affairs, 1934.
- Innis, M.Q. An Economic History of Canada. Toronto: The Ryerson Press, 1935.
- Jones, R.L. History of Agriculture in Ontario 1613-1880. Toronto: University of Toronto Press, 1946.
- Logan, H.A. History of Trade Union Organization In Canada. Chicago, Ill: The University of Chicago Press, 1928.
- Lower, A.R.M. The North American Assault On The Canadian Forest. Toronto: The Ryerson Press, 1938.
- Lower, A.R.M. and Innis, H.A. Settlement And The Forest And Mining Frontiers In Eastern Canada. Toronto: The MacMillan Company of Canada Limited, 1936.

- MacGibbon, D.A. The Canadian Grain Trade. Toronto: The MacMillan Company of Canada Limited, 1932.
- Mackintosh, W.A. Prairie Settlement, The Geographic Setting. Toronto: The MacMillan Company of Canada Limited, 1935.
- Mackintosh, W.A. Economic Problems of The Prairie Provinces. Toronto: The MacMillan Company of Canada Limited, 1935.
- Macoun, J. Manitoba and The Great North West. Guelph: The World Publishing Company, 1882.
- Martin, Chester. Dominion Lands Policy. Toronto: The MacMillan Company of Canada Limited, 1938.
- Morton, A.S. A History Of The Canadian West. New York: Nelson and Sons, 1939.
- Morton, A.S. History of Prairie Settlement. Toronto: The MacMillan Company of Canada Limited, 1938.
- Munroe, W.B. The Seigneurs of Old Quebec. Toronto: Brooks and Company, 1920.
- Reynolds, L.G. The British Immigrant. Toronto: Oxford University Press, 1935.
- Shortt, Adam (editor). Canada And Its Provinces. Toronto: 23 vols. authors edition, Edinburgh University Press, 1914.
- Taylor, H. Considerations On The Past, Present, And Future Conditions Of The Canadas. Montreal: 1839.
- Thompson, Norman and Edgar, Major, J.H. Canadian Railway Development From Earliest Times. Toronto: MacMillan Company of Canada Limited, 1933.

B Articles

- Boulding, K.E. "Economic Analysis and Agricultural Policy," Canadian Journal of Economics and Political Science. Vol. 13, 1947.
- Britnell, G.E. "The War and Canadian Wheat," Canadian Journal of Economics and Political Science. Vol. 7, 1941.
- Creighton, D.C. "Economic Background of the Rebellions," Canadian Journal of Economics and Political Science. Vol. 3, 1937.
- Crumb, Joseph A. "Devaluation and Canada's Trade," The Canadian Banker. Toronto: Journal of the Canadian Bankers Association. Vol. 57, no. 1, Winter, 1950.
- Currie, A.W. "Freight Rates on Grain in Western Canada," Canadian Historical Review. Vol. 21, 1940.

- Fowke, V.C. "Canadian Agriculture In The Postwar Period," The Annals. American Academy of Political and Social Science, Vol. 253, September, 1947.
- _____ "Dominion Aids to Wheat Marketing," Canadian Journal of Economics and Political Science. Vol. 6, 1940.
- _____ "An Introduction To Canadian Agricultural History," Canadian Journal of Economics and Political Science. Vol. 8, 1942.
- _____ "Economic Effects of The War On The Prairie Economy," Canadian Journal of Economics and Political Science. Vol. 11, 1945.
- _____ "Royal Commissions and Canadian Agricultural Policy," Canadian Journal of Economics and Political Science. Vol. 14, 1948.
- Gates, Paul W. "Immigration In The Province of Canada," Canadian Historical Review. Vol. 15, 1934.
- Lingard, C.C. "Economic Forces Behind The Demand For Provincial Status In The Old North West Territories," Canadian Historical Review, Vol. 21, 1940.
- Lower, A.R.M. "The Assault on The Laurentian Barrier," Canadian Historical Review. Vol. 10, 1929.
- Master, D.C. "Financing The Canadian Pacific Railway 1880-5," Canadian Historical Review. Vol. 24, 1943.
- Monthly Review Bank of Nova Scotia, November, 1947. Agriculture In The Transition Period.
- Morton, W.L. "Agriculture In The Red River Colony," Canadian Historical Review. Vol. 30, 1949.
- Patton, H.S. "Canadian Wheat Policy Since The World War," Canadian Journal of Economics and Political Science. Vol. 3, 1937.
- Riddell, R.G. "A Cycle In The Development of The Canadian West," Canadian Historical Review. Vol. 21, 1940.
- Sharp, M.W. "Allied Wheat Buying In Relation to Canadian Marketing Policy 1914-18," Canadian Journal of Economics and Political Science. Vol. 6, 1940.
- Stewart, A. "The Prairie Farm Rehabilitation Programme," Canadian Journal of Economics and Political Science. Vol. 5, 1939.
- Tyson, J.W. "Irrigation Versus Drought," The Canadian Banker, Toronto: Journal of the Canadian Bankers' Association, Vol. 57, no. 1, Winter, 1950.

C Public Documents

Canada Year Book. Ottawa: King's Printer, 1908, 1938, 1940, 1948-49.

Department of Agriculture Marketing Service. Agricultural Marketing Legislation, 1939. Ottawa: Published by authority of the Hon. James G. Gardner, Minister of Agriculture, 1939.

Dominion Bureau of Statistics. Canadian Statistical Review. Ottawa: February, 1950.

The Maritime Provinces In Their Relation To The National Economy of Canada. Ottawa: 1948.

Hansard. House of Commons Debates. Ottawa: King's Printer, 1908, 1923, 1924, 1941.

Hurd, W.B. Agriculture, Climate and Population Of The Prairie Provinces of Canada. Ottawa: Published by authority of the Hon. H.H. Stevens, Minister of Trade and Commerce, Dominion Bureau of Statistics, 1931.

Mackintosh, W.A. Economic Background of Dominion Provincial Relations. Ottawa: Royal Commission on dominion-provincial relations. Report, appendix 3, 1939.

Ontario Bureau of Statistics and Research. A Conspectus of Ontario. Toronto: 1947.

Report Of The Minister Of Agriculture For The Dominion. Ottawa: 1941, 1946, 1949.

Report Of The Royal Grain Inquiry Commission 1938. Ottawa: 1938.

Annual Progress and Programme Report to the Food and Agricultural Organization of the United Nations (FAO). Agriculture, Fisheries, Forestry and Nutrition in Canada, 1949. Ottawa: Prepared by the Canadian inter-departmental FAO Committee, August, 1949.

Saunders, S.A. The Economic History Of The Maritime Provinces. Ottawa: A study prepared for the Royal Commission on dominion-provincial relations, 1939.