

A STUDY OF THE COMPARATIVE CHANGES  
IN AGRICULTURAL PRODUCTIVITY OF  
BRITISH COLUMBIA AND SASKATCHEWAN

by

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## ABSTRACT

The study endeavours to measure the growth in agricultural productivity and the concomitant changes in the relative contributions of the factors of production for the provinces of British Columbia and Saskatchewan over the period 1926 to 1954.

Productivity is defined as the ratio of total output to total input<sup>1</sup>, both expressed in physical units. The inputs were arranged in ten categories: labour, real estate, livestock, implements and machinery, cost of operating farm machinery, building costs, machinery costs, taxes, fertilizers, and miscellaneous. The outputs were arranged into four categories: field crops, livestock, forest products, and house rent. To facilitate the adding of the individual inputs and outputs, which occur in different units, the inputs and outputs are expressed in dollar values at constant prices. This is achieved by deflating the current dollar values by appropriate price indexes. Since the base period of price indexes is 1935-39, the inputs are expressed in dollar values at 1935-39 prices. Thus an index of the

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<sup>1</sup> Inputs are resources used in a production process, outputs are the end products.

input values at 1935-39 prices is analagous to an index of the physical inputs and an index of the output values at 1935-39 prices is analagous to an index of the physical outputs.

The analysis was to a certain extent hampered by the lack of requisite information and the inconsistencies in some of the published data. Though the degree of this inaccuracy could not be determined, it is worth noting that the output index numbers since 1935 were close to the Dominion Bureau of Statistics Index of Farm Production, derived from physical production data. Both indexes agreed reasonably well except for those of British Columbia between 1946 and 1954 during which period the Dominion Bureau of Statistics output index numbers were consistently higher.

The secular trend in the productivity ratios was obscured by varying weather and economic conditions. To make comparisons possible, two periods were chosen during which there were full employment and favourable weather conditions - the years 1926-1928 and 1952-1954. The results indicated that between these two periods the overall agricultural productivity in British Columbia had increased by 17 per cent, and in Saskatchewan by 33 per cent. The changes in the input structure associated with these changes in productivity can be summarized as follows:

(1) The relative contribution of labour has declined. In both provinces it dropped from the major input factor to the third largest input.

(2) The relative share of real estate increased in British Columbia from the second largest to the largest input factor. In Saskatchewan the relative share of real estate remained the second largest input factor.

(3) The relative share of machinery increased in both provinces. In Saskatchewan it advanced from third place in relative importance to become the main input item. While the relative share of machinery increased at a more rapid rate in British Columbia than in Saskatchewan - it follows immediately after real estate in terms of total input.

(4) The remaining input factors are small in relation to the three mentioned above. Although a considerable increase may take place in the absolute amounts - as in the case of fertilizer - the effect upon the input structure was small.

If the 1952-54 output index numbers for British Columbia were adjusted to those computed by the Dominion Bureau of Statistics, agricultural productivity in British Columbia will have increased by 37 per cent. On the other hand, should the rate of productivity increase in British Columbia be really slower than in Saskatchewan, the explanation may lie in too rapid an introduction of technological improvements.

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CHAPTER I

INTRODUCTION

One of the most remarkable features of the past century is the success of the natural sciences in formulating and understanding the "laws of nature," thereby making possible an increase in the stock of available goods. This increase in material wealth has come not only because increasing knowledge has led to the use of new resources<sup>1</sup>, but also because it has enabled more goods to be produced utilizing a given amount of resources. The latter phenomenon means in terms of economic theory that the supply curve of goods and services has shifted to the right. More specifically, these improvements have increased the marginal productivities of the factors of production by an amount which depends upon the nature of improvements and upon the elasticity in which the factors of production can be substituted for each other. Thus, concurrently with an improvement in the effectiveness of the factors of production,

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<sup>1</sup> "Resources" refers to the tangible factors of production such as labour, land, raw material and capital goods. It is considered synonymous with "factors of production" or "inputs."

a change in the input structure may take place<sup>1</sup>. Both of these changes are apparent in agriculture. Productivity<sup>2</sup> has increased over the years in all branches of agriculture through the introduction of innovations such as labour-saving machinery, improved crop varieties, better soil management, pest control, and fertilizers which are land saving, and improved livestock and feeding methods.

This casual observation raises the question, by how much has agricultural productivity increased and what are the concomitant changes in the input structure. A systematic attempt to answer this question for Canadian agriculture was made by Eshete<sup>3</sup>. His study indicated that from 1926-1952 agricultural production increased by 47 per cent and the total input of factors increased by 11 per cent. Consequently his study showed that agricultural productivity<sup>4</sup> had increased by approximately 36 per cent over

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<sup>1</sup> Assuming that factors of production can move freely (competitive factor market).

<sup>2</sup> Synonymous with overall effectiveness. Cf. Smith, Sir E., Measurement of the Effectiveness of the Production Unit, British Institute of Management, London, 1949.

<sup>3</sup> Eshete, H., "Economic Progress and Changes in the Structure of Canadian Agriculture," Master's Thesis, April 1954, Department of Agricultural Economics, The University of British Columbia.

<sup>4</sup> Measured as the ratio of total output to total input.

a period of 26 years. Moreover, the proportion of labour in the input structure had decreased markedly, the proportion of land had decreased somewhat, while the proportions of non-land capital including fertilizer, taxes and the cost of operating farm machinery had all increased. A study using a more refined method indicated that Canadian agricultural productivity had increased by 32 per cent over the same period<sup>1</sup>.

The above studies raised the question, how do different regions<sup>2</sup> of Canada compare in this process of agricultural development. This study is an attempt to provide a partial answer to that question in the case of British Columbia and Saskatchewan which were selected because of the different forms of agriculture which each represents.

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<sup>1</sup> Anderson, W. J., Unpublished research.

<sup>2</sup> The delineation of regions follows the survey system of the Dominion Bureau of Statistics.

## CHAPTER II

### MEASUREMENT OF PRODUCTIVITY

In measuring productivity the resources used in a productive process are referred to as inputs, while the end products of this process are termed outputs<sup>1</sup>. The ratio of outputs to inputs (individual or combined), both in physical units, is a measure of productivity.

Productivity is often measured as the ratio of output to labour input, which is referred to as "labour productivity." In terms of economic welfare "labour productivity" provides a useful measure, as indicated by the following quotation:

"For a given community, higher production implies a higher standard of living, but since economic welfare is the sum of material production and leisure in which to enjoy the fruits of production, (labour) productivity is a far better index of economic welfare than actual production."<sup>2</sup>

It is true that new methods of production which are superior technologically can only be introduced if they

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<sup>1</sup> Interdepartmental Committee on Productivity Analysis, Concepts and Problems in the Measurement and Analysis of Productivity, Report II, Ottawa, 1954, p. 7.

<sup>2</sup> Methods of Labour Productivity Statistics, International Labour Office, Geneva, 1951, p. 1.

are also economically more efficient. Thus changes in economic efficiency may be measured by comparing ratios of total dollar value of output to total dollar value of inputs, both expressed in terms of constant prices of the inputs and outputs. If this ratio rises, it implies an increase in the effectiveness with which the industry uses its resources, and this gain is a part of the process known as economic progress<sup>1</sup>.

In productivity analysis, however, the term "labour productivity" is misleading<sup>2</sup> because it not only expresses the efficiency of labour, but it also includes the contributions of all other inputs with which labour is combined. Thus productivity ratios of a single input show only the proportion between the input and total output. In time series these ratios reveal the rate at which the input rises or declines in relation to total outputs. As such they are useful indicators of certain trends. The ratio of output to labour input, for example, is a fairly

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<sup>1</sup> The terms "economic growth" or "development" and "economic change" are modern synonyms preferred because the term "progress" implies a value judgement extending beyond the scope of economics.

<sup>2</sup> To avoid misinterpretation the Bureau of Labour Statistics, U. S. A., now expresses the results of measurements or productivity in the form of quantity of work required per unit of production and not vice versa. Cf. Measurement of Productivity-Methods Used by the Bureau of Labour Statistics in the U. S. A., Organization for European Economic Co-operation, Paris, 1955.

good measure of the trend in labour requirements and may be an indicator of the efficiency of labour. Similarly the ratio of output to machinery input is a measure of the trend in machinery investment relative to the trend in the outputs<sup>1</sup>. Although in themselves the individual ratios are valuable tools, none of them is an expression of the productivity which this study endeavours to measure. For a measure of the overall productivity the ratio of total outputs to total inputs is required.

It should be noted that the measures of overall productivity include any changes in skill and attitude to work that may occur as well as the technological changes. Both types of change may be part of a secular pattern of improvement in the ability of agriculture to convert factors of production into products.

Measuring changes in overall productivity introduces a problem of measurement that does not exist if the result is expressed in terms of one factor; namely, the problem of adding together inputs which occur in different physical units. In an industry such as agriculture,

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<sup>1</sup> Both examples are from Interdepartmental Committee on Productivity Analysis, Op. Cit., p. 5.



which produces a variety of products, the same problem arises in combining outputs. Some common basis must be found for expressing inputs and outputs so that it is possible to add together inputs to obtain a measurement of the total volume of resources used by the industry, and outputs so as to have a measure of the total output.

This problem can be solved in a reasonably satisfactory manner by expressing the inputs and outputs in money terms at constant prices. The total input values at constant prices is a measure of total physical inputs, and the total output values at constant prices is a measure of total physical output. In time series an index of the values of total input at constant prices is analogous to an index of the total physical inputs; likewise, an index of the values of total output at constant prices is analogous to an index of the total physical outputs.

With respect to outputs, changes in quality are not taken into account by this method. Consequently improvement in the quality of products is not reflected in the output value<sup>1</sup>. Assuming that improvements take place gradually over time, no great error will occur if year by year comparisons are made. Likewise, the quality of some

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<sup>1</sup> Interdepartmental Committee on Productivity Analysis, Op. Cit., p. 14.

agricultural products can be higher or lower in certain years as a result of adverse weather conditions and epidemics. For those years the output value as measured in this way tends to either over or under estimate the total output<sup>1</sup>.

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<sup>1</sup> Dominion Bureau of Statistics, Index of Farm Production, 1954.

## CHAPTER III

### METHOD

Except for labour, the individual input and output values at constant prices cannot be obtained directly by multiplying the yearly volume data by the price of one specific year, because volume data are difficult to obtain or lacking completely. However, dollar measures of the volume of input and output may be obtained by deflating current dollar values of the various categories of input and output by appropriate price indexes.

The data<sup>1</sup> were obtained from Dominion Bureau of Statistics publications. Since the price indexes have the average value of the 1935-1939 period as their base period, all current values of input and output were deflated to values at 1935-1939 prices. For groups of items the accuracy of this method becomes dependent upon the weighting given to the individual items in the formation of the price index series. Another problem was that certain desired indexes were not available and that substitutes had to be used. A shortcoming of some of the data

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<sup>1</sup> The most recently published data were always used, because of later adjustments of original data.

was the lack of agreement between estimated and census values. This was particularly distressing in the three classes of farm capital - real estate, livestock and machinery. Whenever an inconsistency in the data of this kind was encountered census data were considered to be more reliable than estimates, and whenever it seemed appropriate the intercensus years were interpolated or estimates adjusted to conform with census data.

The larger the number of classes the more accurate will be the composite input and output figures. The extent to which inputs are divided, however, not only depends upon the work involved, but also upon the data available. In this study the system of input and output classes used by Dr. Anderson<sup>1</sup> was followed. Accordingly, the inputs were divided into ten categories as follows:

- (1) labour
- (2) real estate
- (3) livestock
- (4) implements and machinery
- (5) cost of operating farm machinery
- (6) building costs
- (7) machinery costs

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<sup>1</sup> Unpublished research.

- (8) taxes
- (9) fertilizers
- (10) miscellaneous

Output was divided into four groups as follows:

- (1) field crops
- (2) livestock products
- (3) forest products
- (4) house rent

Different problems arose in the assembly of data for individual inputs or outputs. They are discussed below and the tables showing individual computations are to be found in the Appendix.

### Inputs

Labour: The ideal measure of labour input would be yearly labour input measured in man hours times yearly wages. But labour-time data were not available on a province-wide basis. The closest approximation was obtained from the Dominion Bureau of Statistics "labour force" surveys which were inaugurated at the end of 1945<sup>1</sup> and by interpolation of census data, both of these express the labour force in man years.

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<sup>1</sup> In the publication of this survey, The Labour Force, the prairie provinces, Alberta, Saskatchewan and Manitoba, are grouped together. The Saskatchewan data were obtained from the Dominion Bureau of Statistics by correspondence.

The "labour force" concept relates to the "employment status during a specific period of time, usually the week preceding the survey date."<sup>1</sup> Thus it includes "numerous persons whose chief activity during a period of one year is student, home-maker, and retired as well as persons never gainfully occupied but seeking employment, merely because they worked a specific number of hours during the survey week or were actually looking for work at that time."<sup>2</sup>

Prior to 1946 the census data referred to "gainfully occupied." This concept includes "persons previously employed, not actually seeking employment during the survey week and not yet retired from gainful employment."<sup>3</sup> It excludes those occasional workers who happen to be employed during the survey week. The arbitrary nature of the "labour force" concept, however, is a less serious shortcoming than it may appear. The productivity ratios will be expressed as a relative of the base period (1926) and as long as the proportion of persons included but not actually employed in agriculture changes little, the inaccuracy will be negligible.

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<sup>1</sup> Dominion Bureau of Statistics, Census of Saskatchewan, 1946, Occupations, Industries, Earnings, Employment and Unemployment, p. xii.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

Another shortcoming of the measure is the equal weighting of all labour units. However, the effect of female and child labour receiving less-than-average male help wages is partly offset by the higher-than-average wages of the highest paid among the hired farm labour force. Here also the relative effect on the productivity ratio will be small as long as the resultant proportion of those who receive less-than-average pay is small with respect to the total labour force and fairly constant from year to year.

In the interpolation of the census data (Tables 1A and 1B) it was assumed that the hired help is more mobile than the owner-operators. Thus changes would have taken place more gradually in between census years in the number of owner-operators than in the total agricultural labour force. Interpolation of the number of owner-operators was, therefore, preferred. The number of owner-operators was indirectly determined for the census years by deducting the number of male farm help (the expenses of hired farm labour divided by the average yearly wage) from the total agricultural labour force. Farm help of each year was added to the number of owner-operators (interpolated and census) to give the total agricultural labour force. Because no labour expenses were available for 1921,

the years 1926 to 1931 were interpolated from the total agricultural labour force census figures.

The labour force estimates of Saskatchewan for 1946 and 1951 were incompatible with census data. Consequently the intercensus figures for this province were interpolated from 1931 to 1951. The figures for the years 1952 to 1954 were derived by taking a percentage of the 1951 census value equal to that of the change in the agricultural labour force estimates. The labour inputs were then expressed in dollars by multiplying the agricultural labour force by the average 1935-1939 yearly wage rate.

Capital Investment includes Real Estate, Livestock, Machinery and some method must be used to express these inputs as an annual input. This was achieved by (1) deflating the current values of capital by the respective price indexes to obtain these values in constant prices; and (2) multiplying the values in constant prices by the rate of interest on farm mortgages times the index of interest rates to obtain the yearly inputs at 1935-1939 prices.

Real Estate - Discrepancies between estimated and census values for real estate necessitated interpolation of the intercensus years between 1926 and 1951 for British Columbia, and between 1926 and 1941, 1946 to 1950 for



Saskatchewan. The 1952 and 1953 values were obtained by adjusting the 1951 census value according to the percentage changes of estimated values.

The yearly real estate inputs in 1935-1939 dollars are the deflated real estate values multiplied by the rates of interest on farm mortgage loans times the index numbers of interest rates on farm mortgages.

Livestock<sup>1</sup> - Discrepancies between estimated and census values necessitated interpolation (as under "real estate") for the intercensus years for British Columbia from 1926 to 1931 and for Saskatchewan from 1926 to 1951. Having made that adjustment the yearly livestock inputs in 1935-1939 dollars were determined in the same manner as for "real estate."

Implements and Machinery - Discrepancies between estimated and census values necessitated interpolation (as under "real estate") of the intercensus years for British Columbia from 1926 to 1951, and for Saskatchewan from 1926 to 1931 and from 1946 to 1951. The 1952 and 1953 estimates were determined in the same manner as the "real estate" values for those years. The yearly inputs in 1935-1939

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<sup>1</sup> Includes poultry and animals on fur farms.

dollars were also determined in the same manner as under "real estate."

Cost of Operating Farm Machinery: The combined inputs of operating tractors, trucks, automobiles, engines and combines at 1935-1939 prices were obtained by deflating the combined current costs by the price index numbers of gasoline, oil and grease pertaining to farmers in Western Canada.

Building Costs: Total building costs include the yearly depreciation of buildings, plus repairs on owned buildings only. The total building costs were deflated by the price index numbers of building materials used by farmers of Western Canada to bring these costs to the 1935-1939 price level.

Machinery Costs: Total machinery costs include the yearly depreciation of machinery plus machinery repairs. The total machine costs were deflated by the price index numbers of farm machinery used by farmers in Western Canada to bring these costs to the 1935-1939 price level.

Taxes: Total taxes on land and buildings are the taxes on owned land and buildings multiplied by the ratio of total land value to land value of operator owned land<sup>1</sup>. The

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<sup>1</sup> Derived from data - Ninth Census of Canada, 1951, pp. 1-2, and Census of Prairie Provinces, 1946, p. 241, - and interpolations.

total taxes were deflated by the index numbers of the tax rates to obtain input of taxes at 1935-1939 rates.

Fertilizer: Fertilizer costs were deflated by the price index numbers of fertilizer used by farmers in Western Canada to get fertilizer input at 1935-1939 prices.

Miscellaneous: Total miscellaneous items consist of veterinary expenses, binder twine, irrigation charges, fence repairs, rope, salt, hardware, fruit and vegetable supplies (i.e. pesticides, containers and nursery). Total miscellaneous was deflated by the price index of hardware used by farmers in Western Canada to obtain miscellaneous input at 1935-1939 prices.

### Outputs

Field Crops: The total income from crops consists of: the cash income from field crops including Canadian Wheat Board payments, plus income in kind from fruits, vegetables and honey (valued at the market price the farmer would have received), plus or minus inventory changes of grains, minus feed and seed expenses. If feed and seed supplies produced in one province are used in the same province, double counting (first as a field crop and later in the form of another crop and animal products) can be prevented by deducting

these supplies from the field crops output. Feed and seed supplies imported into this province (applies particularly to British Columbia) should be counted as an input for field crops and livestock. But only the estimates of combined home-grown and imported feed and seed supplies are published by the Dominion Bureau of Statistics and data on imports are difficult to obtain. Therefore, instead of adding the imports to the inputs, they could be deducted from the outputs together with the home-grown feed and seed supplies. Again, since figures on feed and seed supplies are not published separately the outputs of field crops and livestock could not be adjusted separately. It was arbitrarily decided to deduct the total feed and seed supplies from the field crops output.

The appropriate deflators to bring this output to 1935-1939 prices would have been the index numbers of farm prices of field crops (Quarterly Bulletin of Agricultural Statistics, Dominion Bureau of Statistics), but these are not reported prior to 1935. As the next best deflators the "Wholesale Price Index Number" of field crop products in Western Canada was used.

Livestock: The total income from livestock includes cash income from all livestock products plus income in kind from dairy products, poultry, eggs, meats and other products -

mainly wool (valued at the market price the farmer would have received), plus or minus changes in the livestock inventory. For the same reason mentioned under "field crops" the "Wholesale Price Index Numbers" of animal products in Western Canada were used to deflate the total current value of income from livestock.

Forest Products: The total income from forest products consists of the cash income from the sale of forest products plus income in kind from forest products (valued at the market price the farmer would have received). The total current values were deflated by the Canadian Wholesale Price Index numbers of Lumber and Timber to obtain the input of forest products at 1935-1939 prices.

House Rent: House rents were deflated by an equally weighted combination of the price indexes of building materials and of tax and interest rates pertaining to farmers in Western Canada, to obtain house rent inputs in 1935-1939 prices.

#### Total Inputs and Output:

Expressed as values at constant prices the inputs and outputs can each be totaled or combined in desired groups. They are a measure of the physical resources used and end-products obtained. Since this study endeavours to

analyse (a) the changes in the agricultural productivity of British Columbia and Saskatchewan, and (b) the concomitant changes that took place in the input structure, the following tables were prepared:

1. An index of inputs and outputs at 1935-1939 prices. This table will show the quantity changes of the inputs and outputs over time.
2. A productivity index was prepared by calculating the ratios of index numbers of total outputs to index numbers of the combined inputs. This table will assist in tracing changes in productivity. Similar indexes were prepared by taking labour, real estate and machinery inputs separately.
3. The individual inputs and outputs expressed as a percentage of their respective yearly totals. From this table it is possible to observe changes in the relative share or importance of each input and output.

## CHAPTER IV

### ANALYSIS OF DATA

#### Index of Inputs

(See Tables IA and IB)

The most striking changes to be observed in the amounts of inputs used over the period of study are the decrease in labour and the increases in machinery and fertilizer. Labour in British Columbia has decreased more than 50 per cent since 1926 and 60 per cent since 1939, when agricultural employment was highest. In Saskatchewan the labour input decreased by 25 per cent over the period 1926-1954 and by 35 per cent since 1936, when agricultural employment was highest there. The high labour force figures during the thirties may be explained by the forces of the economic depression which retarded technological progress and even caused labour to migrate back to the farm.

The reduction in labour was made possible by larger investments in labour-saving machinery. This input increased almost three and a half times in British Columbia, while it doubled in Saskatchewan over the period 1926-1954.

It follows that the cost of operating farm machinery and machinery costs (depreciation and repairs) also

TABLE IA  
INDEX NUMBERS OF AGRICULTURAL INPUTS  
BRITISH COLUMBIA, 1926 - 1954  
(1926 = 100)

Year	Labour	Real Estate	Livestock	Implements Machinery	Cost Operating Farm Machinery	Building Costs
1926	100	100	100	100	100	100
1927	103	103	102	105	129	124
1928	105	106	105	109	157	125
1929	108	110	107	114	173	131
1930	110	113	110	119	176	135
1931	113	116	112	123	175	163
1932	110	116	135	123	152	157
1933	110	116	143	124	146	144
1934	113	115	119	124	149	133
1935	113	115	118	125	152	130
1936	113	115	134	125	159	122
1937	113	115	125	125	173	105
1938	113	115	128	126	184	120
1939	115	115	136	126	191	110
1940	113	114	145	126	200	100
1941	108	114	97	127	207	94
1942	100	121	104	142	218	87
1943	92	127	131	157	230	86
1944	95	133	97	173	245	82
1945	87	141	133	191	259	86
1946	85	149	129	208	294	104
1947	97	153	122	220	325	103
1948	103	161	102	239	396	95
1949	100	166	105	255	460	93
1950	69	175	109	271	551	87
1951	74	182	113	289	670	93
1952	62	179	128	302	740	105
1953	54	169	127	324	809	109
1954	46	177	121	341	828	112



TABLE IA (Continued)

Machinery Costs	Taxes	Fertilizers	Miscel- laneous	Total	Sub- Total*	Sub- Total**
100	100	100	100	100	100	100
103	104	99	108	105	107	113
109	99	134	112	108	108	127
117	104	185	119	112	113	137
114	110	268	112	115	116	138
113	131	211	91	118	125	138
113	141	221	70	115	126	130
114	168	185	79	116	127	128
111	165	223	85	117	124	128
111	158	190	87	116	123	129
111	148	185	91	116	120	132
116	149	252	102	117	118	139
112	141	239	97	117	119	142
117	145	248	104	120	118	146
118	128	255	101	118	114	150
118	122	309	103	113	112	153
134	124	323	104	111	116	167
143	120	425	111	111	120	179
154	128	446	143	115	124	192
143	132	493	162	116	131	197
155	131	578	176	119	140	219
178	176	568	220	133	148	242
182	180	582	204	138	153	274
193	193	523	195	140	159	306
199	218	578	202	128	166	346
185	247	491	200	137	176	388
208	256	560	199	134	177	426
205	267	623	190	130	171	456
212	283	558	196	129	181	470

\* Real Estate, Building Costs and Taxes.

\*\* Implements and Machinery, Cost Operating Farm Machinery  
and Machinery Costs.

TABLE IB  
INDEX NUMBERS OF AGRICULTURAL INPUTS  
SASKATCHEWAN, 1926 - 1954  
(1926 = 100)

Year	Labour	Real Estate	Livestock	Implements Machinery	Cost Operating Farm Machinery	Building Costs
1926	100	100	100	100	100	100
1927	101	105	100	103	121	116
1928	103	110	99	105	143	120
1929	105	116	99	108	155	116
1930	106	121	98	101	154	125
1931	108	126	97	113	143	134
1932	110	126	96	105	128	123
1933	111	127	96	100	124	102
1934	112	128	95	90	132	110
1935	114	129	95	83	133	117
1936	115	129	94	78	139	92
1937	112	126	89	75	144	79
1938	109	123	84	67	148	83
1939	106	120	79	65	163	73
1940	104	117	74	62	180	65
1941	99	114	69	76	190	53
1942	96	114	67	73	205	52
1943	93	114	65	70	217	52
1944	89	113	63	66	248	54
1945	88	114	62	71	292	59
1946	86	114	61	110	320	71
1947	86	110	61	119	336	72
1948	83	109	63	131	345	69
1949	80	107	65	142	379	64
1950	80	104	67	152	401	62
1951	78	103	69	164	411	66
1952	77	101	76	172	457	74
1953	72	98	68	189	467	75
1954	75	99	59	210	489	75

TABLE IB (Continued)

Machinery Costs	Taxes	Fertilizers	Miscel- laneous	Total	Sub- Total*	Sub- Total**
100	100	100	100	100	100	100
108	102	68	110	106	106	110
118	102	89	108	110	110	121
125	111	79	83	112	115	128
120	117	46	87	111	121	125
97	122	263	55	111	126	111
95	117	821	51	109	124	105
90	122	395	46	108	125	100
84	126	653	49	108	125	96
83	133	1337	55	109	128	95
77	131	1000	51	108	125	92
74	113	768	40	103	118	90
73	109	868	52	102	115	89
78	114	726	64	102	113	95
77	105	1026	64	100	108	98
78	105	1000	57	98	104	104
90	106	911	89	101	104	113
97	102	795	71	100	103	119
106	95	1116	87	102	102	130
120	91	3084	80	106	102	149
127	96	3353	83	111	105	168
120	99	4832	91	112	103	170
116	105	5742	85	111	103	173
115	102	7421	81	112	100	183
117	100	9742	79	113	98	192
114	105	10163	82	114	99	195
122	105	8984	82	118	98	212
133	111	11326	75	119	98	224
143	109	8289	67	122	98	240

\* Real Estate, Building Costs and Taxes.

\*\* Implements and Machinery, Cost Operating Farm Machinery  
and Machinery Costs.

increased, in British Columbia at a more rapid rate. Consequently the increase in the index of total implements and machinery since 1926 increased by more than 350 per cent in British Columbia and by less than 150 per cent in Saskatchewan.

The real estate index in British Columbia rose in accordance with the increase in land in farms. Table II shows that the area of agricultural land in use increased between 1931 and 1951 by 33 per cent.

TABLE II  
AREA IN FARMS AND PERCENTAGE INCREASE IN FARM LAND  
BRITISH COLUMBIA AND SASKATCHEWAN  
1921, 1931, 1941 and 1951<sup>1</sup>

	British Columbia	Saskatchewan
1921	2,860,593	44,022,907
1931	3,541,541	55,673,460
1941	4,033,570	59,960,927
1951	4,702,274	61,663,195
Percentage increase between 1931 and 1951	33	11

<sup>1</sup> Dominion Bureau of Statistics, Ninth Census of Canada, 1951, Vol. VI, Part II.

The increase in total real estate input over the same period was 56 per cent. Thus the increase in building investment accounts for 23 per cent of the total real estate gain, which is not unreasonable since buildings comprise about one-third of the total real estate value.

For Saskatchewan the real estate input fell by 21 per cent, whereas the area of agricultural land (Table II) increased by 11 per cent. The discrepancy can partly be explained by a decrease in building requirements resulting from the amalgamation of farms and the replacement of animal power by mechanical power - a process which reflects itself to some extent in the 25 per cent drop in building costs. Nevertheless the real estate inputs of the later years of the Saskatchewan series seem to have been underestimated. The increase in real estate input during the depression years may have been due to an attempt by farmers to increase their incomes by bringing more land under cultivation.

In view of the necessary interpolations for livestock inputs in Saskatchewan only census years should be compared. In Saskatchewan a decrease in livestock took place between 1931 and 1946. By 1946 it had been reduced to 61 per cent of the 1926 input. Since then a small increase took place making the 1951 input 69 per cent of

that for 1926. In British Columbia the livestock input decreased also between 1931 and 1941, but the 1941 input amounted to 97 per cent of that for 1946. By 1951 this had risen to 113 per cent and still appears to be rising.

Taxes rose by only a small amount in Saskatchewan, but went up by 280 per cent in British Columbia. This corresponds to the trends in real estate inputs in the two provinces.

A tremendous percentage increase in the use of fertilizers took place. In Saskatchewan the average use over the last five years of the series was more than 12000 per cent higher than the average over the first five years. The average increase in British Columbia over the same period amounted to slightly more than 250 per cent.

For a comparison of the changes in the combined inputs the five-year moving averages are shown in Table VII. This series indicates an increase of 18 per cent in the total inputs for British Columbia between the averages of the first five and the last five years. For Saskatchewan the increase amounted to only 3.4 per cent.

Index of Outputs

(See Tables IIIA and IIIB)

The output index obtained by deflation showed some discrepancies with the Dominion Bureau of Statistics index of farm production<sup>1</sup>. Table IV (columns (a) and (b)) shows that this was particularly true in the case of British Columbia. As pointed out earlier (page 18) field crops and animal products were deflated by indexes pertaining to Western Canada. The western price index for field crops is greatly influenced by the price of wheat, which makes it appropriate for Saskatchewan, but of dubious value for the deflation of field crops in British Columbia.

Another output index was computed for the years 1935-1954 by deflating the combined values of field crops and animal products by the price indexes of agricultural products of each province plus the deflated values of forest products and rent (from Tables 11A and 11B, Appendix). These index numbers (Table IV) are somewhat closer to the Dominion Bureau of Statistics figures, but for some

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<sup>1</sup> Dominion Bureau of Statistics, Index of Farm Production. First issue in 1948, but index starts with 1935. Base period used was the five-year period 1935-1939. To enable comparison the output index from Table 10 (Appendix) was calculated on the same basis.

TABLE IIIA  
INDEX NUMBERS OF AGRICULTURAL OUTPUTS  
BRITISH COLUMBIA, 1926 - 1954  
(1926 = 100)

Year	Field Crops	Livestock	Forest Products	House Rent	Total Output
1926	100	100	100	100	100
1927	91	110	103	122	105
1928	101	121	98	125	114
1929	105	114	96	185	112
1930	152	93	106	133	113
1931	164	110	121	157	130
1932	170	114	122	149	133
1933	189	136	114	151	151
1934	161	109	103	144	127
1935	153	111	107	141	125
1936	132	129	103	140	129
1937	111	116	92	130	114
1938	143	123	97	139	129
1939	213	129	94	133	152
1940	198	133	70	123	149
1941	224	149	63	118	166
1942	205	134	56	112	150
1943	245	159	82	109	178
1944	233	150	85	104	169
1945	215	163	89	107	171
1946	248	153	95	110	176
1947	187	169	96	116	167
1948	193	148	89	106	156
1949	215	142	81	108	159
1950	142	137	86	106	134
1951	92	149	87	102	126
1952	101	169	88	103	140
1953	160	183	83	107	167
1954	117	197	83	112	162



TABLE IIIB  
INDEX NUMBERS OF AGRICULTURAL OUTPUTS  
SASKATCHEWAN, 1926 - 1954  
(1926 = 100)

Year	Field Crops	Livestock	Forest Products	House Rent	Total Output
1926	100	100	100	100	100
1927	106	90	97	116	103
1928	117	87	91	121	112
1929	56	99	91	121	66
1930	65	82	106	122	70
1931	27	107	134	127	46
1932	71	94	126	115	77
1933	48	102	119	119	60
1934	46	105	114	120	59
1935	59	108	132	130	71
1936	40	123	118	111	58
1937	6	100	107	103	26
1938	47	82	122	104	56
1939	117	118	116	97	116
1940	96	139	104	91	103
1941	52	163	77	77	72
1942	175	202	70	78	175
1943	55	263	95	76	92
1944	131	266	87	80	152
1945	70	198	88	84	93
1946	88	112	99	87	92
1947	88	166	89	91	101
1948	117	146	80	90	121
1949	124	148	76	84	127
1950	100	130	73	84	104
1951	180	139	70	81	169
1952	212	136	72	81	193
1953	202	128	75	82	184
1954	86	143	74	79	96

TABLE IV

INDEXES OF AGRICULTURAL OUTPUT (1935 - 1939 = 100) WITH FIVE-YEAR MOVING AVERAGES

BRITISH COLUMBIA AND SASKATCHEWAN, 1935 - 1954

Year	British Columbia						Saskatchewan					
	D.B.S.	Deflation Method		Five-Year Average			D.B.S.	Deflation Method		Five-Year Average		
		I	II					I	II			
	a	b	c	a	b	c	a	b	c	a	b	c
1935	91	96	94				107	108	112			
1936	95	100	96				84	88	90			
1937	101	88	95	100	100	100	31	40	34	100	100	100
1938	103	99	105	105	104	103	103	86	83	112	110	109
1939	110	117	110	109	109	108	175	178	181	117	115	115
1940	116	114	108	108	114	110	165	158	158	160	160	159
1941	113	127	122	111	122	113	110	111	117	167	171	172
1942	100	115	106	117	125	115	248	268	258	171	182	177
1943	115	137	118	120	128	118	138	141	144	164	179	170
1944	140	130	119	128	130	120	196	232	208	170	185	171
1945	131	131	124	137	132	124	129	142	124	146	162	146
1946	152	135	131	143	129	126	139	141	121	145	171	150
1947	146	129	129	144	127	127	128	155	135	131	163	141
1948	144	120	125	145	122	125	132	185	160	139	167	144
1949	149	122	125	140	114	122	128	194	165	155	190	162
1950	134	103	117	137	109	117	168	159	140	183	218	185
1951	127	97	113	136	110	116	218	258	212	202	238	200
1952	133	104	106	134	109	116	267	296	249	196	228	194
1953	138	123	121				230	281	232			
1954	137	120	123				95	146	136			

a. Canada, Dominion Bureau of Statistics, Index of Farm Production, 1954.

b. "Field Crops" and "Animal Products" deflated separately by index numbers for "Western Canada."

c. Combined "Field Crops" and "Animal Products" deflated by provincial index numbers of "Agricultural Products."

years the discrepancies are still high. For comparison of secular changes, however, one is not too concerned with the output of individual years. Table IV shows that for Saskatchewan the five-year moving averages of these index numbers agree with those of the Dominion Bureau of Statistics averages. The British Columbia averages are comparable until 1945, but after that the Dominion Bureau of Statistics figures are consistently higher by about 15 per cent.

It was beyond the scope of this study to evaluate the merits and limitations of each method but in view of the fact that this study is primarily concerned with secular changes, which makes it important to maintain a fairly long-time series the calculated rather than the Dominion Bureau of Statistics output series were used.

The important difference between British Columbia and Saskatchewan is the relatively steady increase of the total British Columbia output compared to the notable production fluctuations in Saskatchewan. These fluctuations are mainly caused by weather conditions which vary greatly from year to year. An all time low in field crops was recorded in 1937 when the index dropped to 6 per cent of the base period. On the other hand a record breaking crop was harvested in 1952. The output of field crops in that

year was 112 per cent above that of 1926 and 3400 per cent greater than in 1937.

To eliminate to some extent the influence of weather fluctuations and other outside uncertainties, the five-year moving averages are presented for the total outputs in Table VII. They reveal that in British Columbia the output reached a maximum in the five-year period centering around 1945, an increase of 57 per cent over the beginning of the period. Following the peak of 1945 it slowly decreased but has been rising again in recent years.<sup>1</sup> One of the reasons for the increase in output has been the cultivation of more farm land.

In Saskatchewan a peak in the outputs occurred around 1944 with an increase of 34 per cent over the beginning of the period. Then the output dropped as in British Columbia, but it recovered sooner and has been climbing more rapidly since.

A comparison of the first and the last years of the averages shows an increase in total output of 34 per cent in British Columbia and of 66 per cent in Saskatchewan. A large increase took place in livestock. This output

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<sup>1</sup> As pointed out earlier, these figures may have a downward bias.

has almost doubled in British Columbia since 1926 and rose just over 40 per cent in Saskatchewan. The output of forest products diminished in both provinces. House rent came up slightly in British Columbia but declined in Saskatchewan.

Output categories as a percentage of total output  
(Tables VA and VB) - Marked fluctuations in weather conditions make it difficult to observe trends in Saskatchewan. The changes in British Columbia suggest that since the war the livestock output has been growing relative to the total output, while that of field crops has been declining. In both provinces forest products and house rent comprised a very small percentage of the total output.

#### Productivity Ratios

(See Table VI)

Before examining the changes in the productivity ratios some important points should be observed. The sudden fluctuations of these ratios are caused by the varying conditions, including weather, war and depression over which the industry has little or no control. The low overall ratios (total output to total input) of the thirties in Saskatchewan can be attributed largely to the drought years. They are further affected by the economic depression, which retarded the introduction of more effective

TABLE VA

AGRICULTURAL OUTPUT CATEGORIES AS A PERCENTAGE

OF TOTAL AGRICULTURAL OUTPUT, BRITISH COLUMBIA, 1926 - 1954

Year	Field Crops	Livestock	Forest Products	House Rent	Total Output
1926	29.9	58.6	4.8	6.7	100
1927	26.1	61.4	4.7	7.8	100
1928	26.3	62.3	4.1	7.3	100
1929	28.1	59.7	4.1	8.1	100
1930	39.9	47.8	4.5	7.8	100
1931	37.9	49.5	4.5	8.1	100
1932	38.2	50.0	4.4	7.4	100
1933	37.3	52.4	3.6	6.7	100
1934	38.0	50.5	3.9	7.6	100
1935	36.3	52.0	4.1	7.5	100
1936	30.4	58.6	3.8	7.2	100
1937	29.1	59.5	3.8	7.6	100
1938	33.1	56.1	3.6	7.2	100
1939	41.7	49.5	3.0	5.8	100
1940	39.9	52.4	2.2	5.5	100
1941	40.5	52.9	1.8	4.8	100
1942	41.0	52.2	1.8	5.0	100
1943	41.2	52.5	2.2	4.1	100
1944	41.3	52.2	2.4	4.1	100
1945	37.5	55.8	2.5	4.2	100
1946	42.2	51.0	2.6	4.2	100
1947	33.4	59.2	2.8	4.6	100
1948	37.1	55.6	2.8	4.5	100
1949	41.0	52.4	2.5	4.5	100
1950	30.2	61.7	2.9	5.2	100
1951	21.9	69.4	3.3	5.4	100
1952	21.5	70.6	3.0	4.9	100
1953	28.7	64.6	2.4	4.3	100
1954	21.6	71.3	2.5	4.6	100

TABLE VB  
AGRICULTURAL OUTPUT CATEGORIES AS A PERCENTAGE  
OF TOTAL AGRICULTURAL OUTPUT, SASKATCHEWAN, 1926 - 1954

Year	Field Crops	Livestock	Forest Products	House Rent	Total Output
1926	78.5	17.0	.7	3.8	100
1927	80.2	14.9	.6	4.3	100
1928	82.1	13.3	.5	4.1	100
1929	66.5	25.6	.9	7.0	100
1930	72.4	19.9	1.0	6.6	100
1931	47.3	40.1	2.0	10.6	100
1932	72.6	20.7	1.1	5.7	100
1933	62.3	28.7	1.3	7.6	100
1934	60.7	30.2	1.3	7.8	100
1935	65.8	25.9	1.3	7.0	100
1936	54.9	36.4	1.4	7.3	100
1937	16.7	65.3	2.8	15.1	100
1938	66.4	25.0	1.5	7.1	100
1939	78.9	17.3	.7	3.2	100
1940	72.9	23.0	.7	3.3	100
1941	56.8	38.5	.7	4.0	100
1942	78.3	19.7	.3	1.7	100
1943	47.4	48.7	.7	3.2	100
1944	67.7	29.9	.4	2.0	100
1945	59.5	36.4	.6	3.5	100
1946	74.8	20.9	.7	3.6	100
1947	68.0	27.9	.6	3.4	100
1948	76.1	20.6	.4	2.8	100
1949	76.4	20.6	.4	2.6	100
1950	74.6	21.8	.5	3.1	100
1951	83.8	14.1	.3	1.8	100
1952	86.2	12.0	.3	1.6	100
1953	86.2	11.9	.3	1.7	100
1954	70.8	25.5	.5	3.1	100

TABLE VI  
AGRICULTURAL PRODUCTIVITY RATIOS  
BRITISH COLUMBIA AND SASKATCHEWAN, 1926 - 1954  
(1926 = 1)

Year	Ratio Total Output - Total Input		Ratio Total Output - Labour Input	
	British Columbia	Saskatchewan	British Columbia	Saskatchewan
1926	1.00	1.00	1.00	1.00
1927	1.00	.97	1.02	1.02
1928	1.06	1.02	1.09	1.09
1929	1.00	.59	1.04	.63
1930	.98	.61	1.03	.66
1931	1.10	.41	1.15	.43
1932	1.16	.71	1.21	.70
1933	1.30	.56	1.37	.54
1934	1.09	.55	1.12	.53
1935	1.08	.65	1.11	.62
1936	1.11	.54	1.14	.50
1937	.97	.25	1.01	.23
1938	1.10	.55	1.14	.51
1939	1.27	1.14	1.32	1.09
1940	1.26	1.03	1.32	.99
1941	1.47	.73	1.54	.73
1942	1.35	1.73	1.50	1.82
1943	1.60	.92	1.93	.99
1944	1.47	1.49	1.77	1.71
1945	1.47	.88	1.96	1.06
1946	1.52	.83	2.07	1.07
1947	1.26	.90	1.72	1.17
1948	1.13	1.14	1.51	1.46
1949	1.14	1.10	1.59	1.59
1950	1.05	.92	1.94	1.30
1951	.92	1.48	1.70	2.17
1952	1.04	1.64	2.17	2.27
1953	1.28	1.55	2.96	2.56
1954	1.26	.79	3.39	1.25



TABLE VI (Continued)

Ratio Total Output - Real Estate Input		Ratio Total Output - Machinery Input	
British Columbia	Saskatchewan	British Columbia	Saskatchewan
1.00	1.00	1.00	1.00
.98	.97	.93	.94
1.06	1.02	.90	.93
.99	.57	.82	.52
.97	.58	.82	.56
1.04	.37	.94	.41
1.06	.62	1.02	.73
1.19	.48	1.18	.60
1.02	.47	.99	.61
1.02	.55	.97	.75
1.08	.46	.98	.63
.97	.22	.82	.29
1.08	.49	.91	.63
1.29	1.03	1.04	1.22
1.31	.95	.99	1.05
1.48	.69	1.08	.69
1.29	1.68	.90	1.55
1.48	.89	.99	.77
1.36	1.49	.88	1.17
1.31	.91	.87	.62
1.26	.88	.80	.55
1.13	.98	.69	.59
1.02	1.17	.57	.70
1.00	1.27	.52	.69
.81	1.06	.39	.54
.72	1.71	.32	.87
.79	1.97	.33	.91
.98	1.88	.37	.82
.90	.98	.34	.40

means of production and prevented farm labour from migrating out of agriculture. The ratios during the war years, 1940 to 1945, however, are sharply higher. In that period labour was absorbed by the war effort and the farmers remaining, presumably worked harder and more effectively to boost production - an effort in which they were assisted by favourable weather conditions.

These fluctuations obscure the secular changes in productivity to a great extent. An attempt was made to eliminate these fluctuations by computing the five-year moving averages, but they are so large that this objective was only partially attained.

The five-year moving averages, shown in Table VII, indicate that over the last quarter of a century a considerable increase in productivity has taken place in Saskatchewan<sup>1</sup>, and a more moderate increase in British Columbia<sup>2</sup>. For Saskatchewan the average of the last five years of the series is 78 per cent higher than the average of the first five years; for British Columbia the increase amounts only to 4 per cent. As can be seen in the same

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<sup>1</sup> Since the real estate input in Saskatchewan may have a downward bias at the end of the series, the productivity ratio may have an upward bias.

<sup>2</sup> As pointed out on page 29 the B. C. total output may have a downward bias from 1945-1954, which would mean a downward bias in the productivity ratio for that period.

TABLE VII  
FIVE-YEAR MOVING AVERAGES OF INDEX NUMBERS OF TOTALS  
OF OUTPUTS, INPUTS AND PRODUCTIVITY OF AGRICULTURE  
BRITISH COLUMBIA AND SASKATCHEWAN, BETWEEN 1926 - 1954

Year	Total Outputs		Total Inputs		Productivity	
	British Columbia	Saskatchewan	British Columbia	Saskatchewan	British Columbia	Saskatchewan
1928	109	90	108	108	1.01	.83
1929	115	79	112	111	1.03	.71
1930	120	74	114	111	1.05	.67
1931	128	64	115	111	1.11	.58
1932	131	62	116	110	1.13	.56
1933	133	63	116	109	1.15	.58
1934	133	65	116	108	1.15	.60
1935	129	55	116	107	1.11	.51
1936	125	54	117	106	1.07	.51
1937	130	65	117	105	1.11	.62
1938	135	72	117	103	1.15	.70
1939	142	75	117	101	1.21	.74
1940	149	104	116	101	1.28	1.03
1941	159	112	115	100	1.38	1.12
1942	162	119	114	100	1.42	1.19
1943	167	117	113	101	1.48	1.16
1944	169	121	114	104	1.48	1.16
1945	172	106	119	106	1.45	1.00
1946	168	112	124	108	1.35	1.04
1947	166	107	129	110	1.29	.97
1948	158	109	132	112	1.25	.97
1949	148	124	135	112	1.10	1.11
1950	143	143	135	114	1.06	1.25
1951	145	155	134	115	1.08	1.35
1952	146	149	132	117	1.11	1.27

table the reason for this difference is not only a lower increase in the agricultural output in British Columbia than in Saskatchewan (23 and 84 per cent respectively between the averages of the first and last five years of the series), but it is also caused by a higher increase in inputs in British Columbia than in Saskatchewan; in the former the average total inputs of the last five years is 18 per cent higher than the average inputs of the first five years. In Saskatchewan the increase amounted to only 3.4 per cent.

The rise in output for British Columbia can be attributed mainly to an increase in livestock production; in Saskatchewan it is mainly due to an increase in field crop products. The larger inputs in British Columbia are mainly a result of an increase in real estate, livestock and machinery. Consequently Table VIII shows that the productivity ratios of real estate and machinery in British Columbia (i.e., total output to real estate input and total output to machinery input) are below those of Saskatchewan since 1948. In spite of the larger decrease in labour input in British Columbia the total output to labour input ratio has increased more in Saskatchewan. The average of the last five years is 75 per cent higher than the average over the first five years in British Columbia. The corresponding increase amounted to 143 per cent in Saskatchewan.

TABLE VIII

FIVE-YEAR MOVING AVERAGES OF PRODUCTIVITY INDEX NUMBERS  
OF LABOUR, REAL ESTATE AND MACHINERY IN AGRICULTURE  
BRITISH COLUMBIA AND SASKATCHEWAN, BETWEEN 1926 - 1954\*

Year	Total Output: Labour Input		Total Output: Real Estate Input		Total Output: Machinery Input	
	British Columbia	Saskat- chewan	British Columbia	Saskat- chewan	British Columbia	Saskat- chewan
1928	1.04	.88	1.00	.83	.89	.79
1929	1.07	.77	1.01	.70	.88	.67
1930	1.10	.70	1.02	.63	.90	.63
1931	1.16	.59	1.05	.52	.96	.56
1932	1.18	.57	1.06	.50	.99	.58
1933	1.19	.56	1.07	.50	1.02	.62
1934	1.19	.58	1.07	.52	1.03	.66
1935	1.15	.48	1.06	.44	.99	.58
1936	1.10	.48	1.03	.44	.93	.58
1937	1.14	.59	1.09	.55	.94	.70
1938	1.19	.66	1.15	.63	.95	.76
1939	1.27	.71	1.23	.68	.97	.78
1940	1.36	1.03	1.29	.97	.98	1.03
1941	1.52	1.12	1.37	1.05	1.00	1.06
1942	1.61	1.25	1.38	1.14	.97	1.05
1943	1.74	1.26	1.38	1.13	.94	.96
1944	1.85	1.33	1.34	1.17	.89	.93
1945	1.89	1.20	1.31	1.03	.85	.74
1946	1.81	1.29	1.22	1.09	.76	.73
1947	1.77	1.27	1.14	1.04	.69	.63
1948	1.77	1.32	1.04	1.07	.59	.61
1949	1.69	1.54	.94	1.24	.50	.68
1950	1.78	1.76	.87	1.44	.43	.74
1951	2.07	1.99	.86	1.58	.39	.77
1952	2.43	1.91	.84	1.52	.35	.71

\* Derived from Table.VII..

The high productivity increase in Saskatchewan still bears the influence of the drought years and the economic depression of the early thirties. It may be more appropriate, therefore, to compare the changes in productivity between years in which climatic and economic conditions are approximately the same. In these respects the periods 1926 to 1928 and 1952 to 1954 correspond reasonably well - both were periods of full employment and favourable weather conditions.

The increase in overall agricultural productivity between these two periods amounted to 17 per cent in British Columbia<sup>1</sup> and 33 per cent in Saskatchewan over the same years.

The ratio of total output to real estate input rose in Saskatchewan by 62 per cent, while it declined in British Columbia by 12 per cent. The ratio of total output to machinery input declined in both provinces, but to a much greater extent in British Columbia; in Saskatchewan the index of machine input to total output of the period 1952 to 1954 amounted to 74 per cent of that for 1926 to 1928; in British Columbia it was only 37 per cent. On the other hand, the ratio of total output to labour input

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<sup>1</sup> See footnotes on pages 34 and 40.

increased more in British Columbia. It rose 174 per cent as compared to a 95 per cent increase in Saskatchewan.

Input Categories as a Percentage of Total Input

The increase in productivity as a result of technological improvements associated with changes in the input structure are shown in Tables IXA and IXB. It can be seen that labour comprises the largest share of the inputs for most of the series. Up to 1942 it formed more than 50 per cent of the total inputs in British Columbia, and approximately 35 per cent in Saskatchewan. After this time the share which labour contributed declined rather rapidly in British Columbia, and by 1954 it had dropped 64 per cent from the 1926 level. In Saskatchewan the decrease over the same period amounted to 39 per cent.

At the same time the relative share of total machinery inputs increased considerably. In British Columbia it rose from 8 to 30 per cent of the total inputs - an increase of 275 per cent; in Saskatchewan from 25 per cent to 48 per cent, an increase of 92 per cent. The share of real estate inputs increased also in British Columbia - from 25 to 36 per cent of the total, or an increase of 44 per cent. In Saskatchewan, however, the importance of real

TABLE IXA  
AGRICULTURAL INPUT CATEGORIES  
AS A PERCENTAGE OF TOTAL AGRICULTURAL INPUT  
BRITISH COLUMBIA, 1926 - 1954

Year	Labour	Real Estate	Livestock	Implements Machinery	Cost Operating Farm Machinery	Building Costs
1926	57.4	18.3	3.1	2.0	3.1	4.0
1927	56.2	18.0	3.0	2.0	3.8	4.8
1928	55.7	17.9	3.0	2.0	4.4	4.7
1929	55.0	17.9	3.0	2.1	4.7	4.7
1930	54.8	18.0	3.0	2.1	4.7	4.7
1931	55.0	18.0	2.9	2.1	4.6	5.6
1932	54.9	18.4	3.6	2.2	4.0	5.5
1933	54.6	18.3	3.8	2.2	3.9	5.0
1934	55.5	18.1	3.2	2.2	3.9	4.6
1935	55.7	18.2	3.2	2.2	4.0	4.5
1936	55.6	18.1	3.6	2.2	4.2	4.2
1937	55.3	18.0	3.3	2.2	4.5	3.6
1938	55.1	17.9	3.4	2.2	4.8	4.1
1939	55.3	17.5	3.5	2.1	4.9	3.7
1940	55.0	17.8	3.8	2.2	5.2	3.4
1941	54.5	18.4	2.6	2.3	5.6	3.3
1942	51.5	19.8	2.9	2.6	6.0	3.2
1943	47.7	20.9	3.7	2.9	6.4	3.1
1944	47.1	21.1	2.6	3.0	6.5	2.9
1945	43.2	22.3	3.6	3.3	6.9	3.0
1946	40.7	22.8	3.4	3.5	7.6	3.5
1947	42.2	21.0	2.8	3.4	7.5	3.1
1948	42.6	21.3	2.3	3.5	8.8	2.8
1949	40.9	21.9	2.3	3.7	10.1	2.7
1950	30.9	24.8	2.6	4.3	13.2	2.7
1951	31.2	24.3	2.5	4.3	15.0	2.7
1952	26.4	24.5	3.0	4.6	16.9	3.2
1953	23.7	23.6	3.0	5.0	19.0	3.4
1954	20.5	25.3	2.9	5.3	19.6	3.5



TABLE IXA (Continued)

Machinery Costs	Taxes	Fertilizers	Miscel- laneous	Total	Sub- Total*	Sub- Total**
3.3	3.2	.7	5.1	100	25.5	8.3
3.2	3.1	.7	5.2	100	25.9	9.0
3.3	2.9	.9	5.3	100	25.4	9.2
3.4	2.9	1.2	5.3	100	25.5	10.1
3.2	3.0	1.6	4.9	100	25.7	10.0
3.1	3.5	1.3	3.9	100	27.1	9.8
3.2	3.9	1.3	3.1	100	27.7	9.4
3.2	4.6	1.1	3.5	100	27.8	9.2
3.1	4.5	1.3	3.7	100	27.1	9.2
3.1	4.3	1.2	3.8	100	27.0	9.3
3.1	4.0	1.1	4.0	100	26.3	9.5
3.2	4.0	1.5	4.4	100	25.6	9.9
3.1	3.8	1.4	4.2	100	25.8	10.1
3.2	3.8	1.5	4.4	100	25.1	10.2
3.3	3.4	1.5	4.4	100	24.6	10.6
3.4	3.4	1.9	4.6	100	25.1	11.2
3.9	3.5	2.0	4.7	100	26.5	12.5
4.2	3.4	2.7	5.1	100	27.4	13.4
4.3	3.5	2.7	6.3	100	27.4	13.9
4.0	3.6	3.0	7.1	100	28.9	14.2
4.2	3.5	3.4	7.5	100	29.8	15.3
4.4	4.2	3.0	8.4	100	28.4	15.2
4.3	4.1	3.0	7.5	100	28.2	16.6
4.5	4.4	2.6	7.1	100	28.9	18.2
5.0	5.4	3.2	8.0	100	32.9	22.4
4.4	5.7	2.5	7.4	100	32.8	23.6
5.0	6.0	2.9	7.5	100	33.7	26.5
5.1	6.5	3.3	7.4	100	33.5	29.1
5.3	6.9	3.0	7.7	100	35.7	30.3

\* Real Estate, Building Costs and Taxes.

\*\* Implements and Machinery, Cost Operating Farm Machinery and Machinery Costs.

TABLE IXB  
AGRICULTURAL INPUT CATEGORIES  
AS A PERCENTAGE OF TOTAL AGRICULTURAL INPUT  
SASKATCHEWAN, 1926 - 1954

Year	Labour	Real Estate	Livestock	Implements Machinery	Cost Operating Farm Machinery	Building Costs
1926	34.9	20.8	3.6	5.7	5.8	4.1
1927	33.6	20.8	3.4	5.5	6.6	4.5
1928	32.9	20.9	3.2	5.4	7.5	4.4
1929	32.7	21.5	3.1	5.4	7.9	4.2
1930	32.6	22.1	3.1	5.5	7.8	4.5
1931	34.0	23.7	3.1	5.7	7.4	4.9
1932	35.2	24.1	3.2	5.4	6.7	4.6
1933	35.9	24.5	3.2	5.2	6.6	4.3
1934	36.3	24.6	3.2	4.7	7.0	4.1
1935	36.3	24.5	3.1	4.3	7.0	4.3
1936	37.2	25.0	3.1	4.1	7.4	3.5
1937	37.8	25.5	3.1	4.1	8.1	3.1
1938	37.4	25.2	3.0	3.7	8.4	3.3
1939	36.3	24.5	2.8	3.6	9.2	2.9
1940	36.2	24.3	2.6	3.5	10.3	2.6
1941	35.2	24.1	2.5	4.4	11.1	2.2
1942	33.2	23.5	2.4	4.1	11.6	2.1
1943	32.4	23.6	2.3	4.0	12.5	2.1
1944	30.5	23.1	2.2	3.7	14.0	2.1
1945	28.9	22.4	2.1	3.8	15.8	2.2
1946	27.1	21.3	2.0	5.6	16.5	2.6
1947	26.9	20.5	2.0	6.0	17.3	2.6
1948	26.0	20.4	2.0	6.7	17.9	2.5
1949	25.1	19.8	2.1	7.1	19.5	2.4
1950	24.6	19.2	2.1	7.6	20.3	2.2
1951	24.0	18.8	2.1	8.1	20.7	2.3
1952	22.8	17.9	2.3	8.2	22.3	2.5
1953	21.2	17.3	2.1	9.0	22.7	2.6
1954	21.3	16.9	1.8	9.7	23.0	2.5

TABLE IXB (Continued)

Machinery Costs	Taxes	Fertilizers	Miscel- laneous	Total	Sub- Total*	Sub- Total**
13.2	6.0	.01	5.9	100	30.9	24.6
13.6	5.9	.01	6.2	100	31.1	25.7
14.3	5.6	.01	5.8	100	31.0	27.1
14.7	6.0	.01	4.4	100	31.7	28.1
13.9	6.2	.004	4.5	100	32.8	27.1
11.6	6.6	.02	2.9	100	35.2	24.7
11.5	6.5	.07	2.8	100	35.1	23.7
11.1	6.8	.04	2.5	100	35.6	22.9
10.3	7.0	.06	2.7	100	35.8	22.0
10.1	7.3	.12	3.0	100	36.2	21.3
9.5	7.4	.09	2.8	100	35.9	21.0
9.4	6.6	.07	2.3	100	35.2	21.6
9.5	6.5	.08	3.0	100	35.0	21.6
10.2	6.8	.07	3.4	100	34.2	23.0
10.2	6.4	.10	3.8	100	33.3	24.0
10.5	6.5	.10	3.4	100	32.8	26.0
11.7	6.3	.09	5.2	100	31.8	27.3
12.7	6.1	.08	4.2	100	31.8	29.1
13.7	5.6	.11	5.0	100	30.8	31.3
14.9	5.2	.29	4.5	100	29.8	34.5
15.1	5.2	.30	4.4	100	29.1	37.2
14.2	5.4	.43	4.8	100	28.4	37.6
13.8	5.7	.51	4.5	100	28.6	38.3
13.5	5.5	.65	4.3	100	27.7	40.2
13.6	5.4	.85	4.1	100	26.8	41.6
13.2	5.6	.88	4.3	100	26.7	42.0
13.7	5.4	.75	4.1	100	25.8	44.3
14.9	5.6	.94	3.7	100	25.5	46.6
15.5	5.4	.67	3.2	100	24.8	48.2

\* Real Estate, Building Costs and Taxes.

\*\* Implements and Machinery, Cost Operating Farm Machinery and Machinery Costs.

estate in the input structure declined from 31 to 25 per cent of the total inputs, a decrease of 19 per cent.

The importance of livestock input decreased in both provinces, while the share of fertilizer inputs increased. The proportions of taxes and miscellaneous items increased in British Columbia but declined in Saskatchewan.

The changes in the order of importance can be summarized as follows:

- (1) The relative contribution of labour has declined. In both provinces it dropped from the major input factor to the third largest input.
- (2) The relative share of real estate increased in British Columbia from the second largest to the largest input factor. In Saskatchewan the relative share of real estate remained the second largest input factor.
- (3) The relative share of machinery increased in both provinces. In Saskatchewan it advanced from third place in relative importance to become the main input item. While the relative share of machinery increased at a faster rate in British Columbia than in Saskatchewan - it follows immediately after real estate in terms of total input.
- (4) The remaining input factors are small in relation to the three mentioned above. Although a considerable increase

may take place in the absolute amounts - as in the case of fertilizer - the effect upon the input structure was small.

### Discussion

The changes in the productivity ratios and in the input structure together indicate the effect of technological development upon agriculture. The rates of change and particularly the difference in the rate of growth of overall agricultural productivity between British Columbia and Saskatchewan, as demonstrated by this study, should be viewed with caution for various reasons.

The validity of the method of measurement rests upon the assumption that 1935-1939 market prices and current quantities provide an appropriate weighting system for the individual inputs and outputs. Such an assumption implies a perfect market during the base period in which prices were determined by unrestricted operation of the competitive forces of supply and demand and that the relative price structure in 1935-1939 has not changed throughout the study period. In many cases, however, pricing is determined in markets which are not fully competitive, and besides, the limitations to the perfect nature of the market are not necessarily the same in two different provinces.

Then there is the lack of the requisite information and the shortcomings of the data used, as exemplified by the labour input. Recognition must also be given to the inaccuracies in the published data which were particularly apparent in capital investment inputs.

Finally, it must be admitted that the two periods under comparison are only approximately the same with respect to weather and economic conditions, which could have a substantial effect upon productivity.

In arriving at any conclusions as to the rates of change in the two provinces one should consider the validity of the entirely different Dominion Bureau of Statistics approach in obtaining the index numbers of the combined outputs. By this approach indexes of physical production are derived by weighting indexes of individual outputs by production in a base period which remains constant through the years. As was observed in Table IV the Dominion Bureau of Statistics output index numbers are in reasonable agreement with those obtained by the deflation method in the case of Saskatchewan. Similar agreement was observed in the case of British Columbia until the end of the war, after which the Dominion Bureau of Statistics output index numbers were considerably higher. The adoption of the Dominion Bureau of Statistics output index numbers for the period 1952-1954 (i.e., adjusting the output index numbers with the base period 1926 to the

Dominion Bureau of Statistics output index numbers which have the years 1935-1939 as the base period) increases the average productivity ratio for those years from 1.19 to 1.40. Instead of a 17 per cent increase in agricultural productivity in British Columbia between the periods 1926-1928 and 1952-1954, the increase amounts to 37 per cent. Thus if the Dominion Bureau of Statistics output index were accepted as the more accurate, the results would point to an increase in productivity over a period of 25 years which is approximately the same for both provinces (33 per cent in Saskatchewan), and which comes close to the national estimates of 36 and 32 per cent.

On the other hand, if it were indeed the case that productivity in British Columbia has been growing at a slower rate than in Saskatchewan, then the explanation may be sought in the different changes in the input structure between the two provinces. The migration of labour out of agriculture has taken place at a much faster rate in British Columbia than in Saskatchewan. This is associated with the faster growth of machinery inputs in British Columbia. The indications are that agricultural labour is absorbed by outside industries at a greater rate than in Saskatchewan. This is not surprising for a province which experienced a rapid industrial expansion since the

war. Consequently, a supposedly slower increase in agricultural productivity in British Columbia cannot be explained by too high inputs as a result of the lack of alternative employment for agricultural workers in other industries. The productivity ratios of real estate and machinery (Table VI) indicate a greater increase in the intensity of land and machine use for Saskatchewan. A smaller increase in the land productivity of British Columbia appears to arise from the utilization of less fertile soil and the slower increase in the use of fertilizers. The lower productivity of machinery may be explained by an increase in machinery which is largely relative to the remaining factors of production.

In other words the slower growth in productivity in British Columbia may be caused by a malallocation of resources which, in turn, is the result of either too fast a migration of agricultural labour out of agriculture or too fast an introduction of machinery. The latter probably means that in British Columbia farmers have not yet attained the full benefits of technological improvements. Considering the diversified nature of agriculture in British Columbia, the comparatively smaller holdings, and the younger experience in mechanization in that province as compared to Saskatchewan, this slower development is not surprising.



A P P E N D I X

TABLE 1 A AGRICULTURAL LABOUR FORCE, BRITISH COLUMBIA, 1926-1954

Year	Current Ex- penses Hired Farm Labour	Average Year- ly Wage Male Farm Help	No. of Labourers	Total Agric. Labour Force (Census)	No. of Owner- Operators	Total Agricultural Labour Force	
	(a) '000	(b) \$	#	(c) ##	###	Estimates	Census and Interpolated
1921				35040		'000	'000
							35
1926	5391	767	7029				39
1927	5695	804	7083				40
1928	5844	806	7251				41
1929	5974	792	7543				42
1930	5842	741	7884				43
1931	4780	633	7551	43603	36052		44
1932	3537	467	7574		35896		43
1933	3433	446	7697		35741		43
1934	3750	462	8117		35585		44
1935	4075	465	8763		35429		44
1936	4181	494	8464		35274		44
1937	4680	513	9123		35118		44
1938	4900	522	9387		34962		44
1939	5140	525	9790		34806		45
1940	5385	564	9548		34651		44
1941	4320	612	7059	41554	34495		42
1942	5084	792	6419		32619		39
1943	5236	972	5387		30744		36
1944	8407	1080	7784		28869		37
1945	8957	1200	7464		26994		34
1946	9835	1248	7881		25119	33	
1947	10662	1332	8005			38	
1948	11628	1512	7690			40	
1949	10105	1488	6791			39	
1950	13864	1476	9393			27	
1951	12737	1692	7523	28440		29	
1952	17663	1776	9945			24	
1953	17255	1812	9523			21	
1954	20643	1824	11317			18	

TABLE 1 B

## AGRICULTURAL LABOUR FORCE, SASKATCHEWAN, 1926-1954

Year	Current Ex- penses Hired Farm Labour	Average Year- ly Wage Male Farm Help	No. of Labourers	Total Agric. Labour Force (Census)	No. of Owner- Operators	Total Agricultural Labour Force	
	(a) '000	(b) \$	#	(c) ##	###	Estimates (d) '000	Census and Interpolated '000
1921	-	-	-	173759	-	-	-
1926	31903	678	47054	-	-	-	189
1927	30245	692	43707	-	-	-	192
1928	29471	695	42404	-	-	-	195
1929	28066	685	40972	-	-	-	198
1930	23408	593	39474	-	-	-	201
1931	16262	418	38904	204316	165412	-	204
1932	12748	324	39346	-	168167	-	208
1933	11951	305	39184	-	170921	-	210
1934	12215	319	38292	-	173676	-	212
1935	13205	345	38275	-	176430	-	215
1936	13193	346	38130	217315	179185	-	217
1937	12461	344	36224	-	175083	-	211
1938	12722	363	35047	-	170981	-	206
1939	12600	381	33071	-	166880	-	200
1940	14845	444	33434	-	162778	-	196
1941	14830	516	28740	187416	158676	-	187
1942	17480	660	26485	-	155997	-	182
1943	19283	840	22956	-	153318	-	176
1944	19360	1032	18760	-	150638	-	169
1945	19748	1104	17888	-	147959	-	166
1946	21525	1152	18685	163965	145280	207	163
1947	24334	1224	19881	-	141687	204	162
1948	23828	1332	27889	-	138114	193	156
1949	24860	1392	17859	-	134532	172	152
1950	27392	1344	20381	-	130949	167	151
1951	30563	1512	20214	147580	127366	168	148
1952	35163	1644	21389	-	-	165	145
1953	32356	1668	19398	-	-	154	136
1954	27628	1620	17054	-	-	159	141

TABLES 1 A and 1 B, REFERENCES

# Without Board

## 14 years and older, both sexes

### Intercensus years interpolated

(a) 1926-49: Handbook of Agricultural Statistics, Part II, Farm Income, Pp. 70 and 74.

1950-54: Farm Income. 1952, '53 and '54.

(b) 1926-54: Quarterly Bulletin of Agricultural Statistics (preceded by Monthly Bulletin of Agricultural Statistics). For the period 1940-1954 the average of January, May and August wages was multiplied by 12.

(c) 1921, 1931,  
1941 and

1951: Census of Canada, 1951, Vol. IV, —  
Labour Force, Table 2, Pp. 2-5, 2-6.

1936, 1946 (Saskatchewan): Census 1946, Prairie Provinces, Vol. II, Occupations, Earnings, Employment, etc., Table 1, P. 317.

1946 (British Columbia): The Labour Force, November 1945 - January 1955,  
Reference Paper No. 58, Table 13, P.72.

(d) 1946-54 (British Columbia): The Labour Force, November 1945-January 1955, Ibid.

1946-54 (Saskatchewan): Correspondence with  
Dominion Bureau of Statistics,  
Director of Special Surveys Division,  
Ottawa.

TABLE 2 ESTIMATION OF ANNUAL REAL ESTATE INPUT, BRITISH COLUMBIA AND SASKATCHEWAN, 1926-1954

Year	Estimated(a) Current Values		(b) Census		Index Land(c) Value per Acre		Deflated Land Values*		Interest(d) Rate	Real Estate Input	
	B.C.	Sask.	B.C.	Sask.	B.C.	Sask.	B.C.	Sask.	West.Can.	B.C.	Sask.
	'000	'000	'000	'000			'000	'000		'000	'000
1921			171548		206						
1926	148056	1093440		1033687	135	162	99471	638078	7.8	7759	49770
1927	148056	1093440			150	169	102710	671299	7.3	7498	49005
1928	148056	1093440			152	175	105949	704520	7.4	7840	52135
1929	148056	1093440			152	162	109188	737741	7.5	8189	55331
1930	148056	1093440			128	143	112427	770962	7.5	8432	57822
1931	148056	1093440	144581	989144	125	123	115665	804182	7.6	8791	61118
1932	126942	835819			110	104	115414	807840	7.6	8771	61396
1933	123007	839597			106	104	115163	811498	7.3	8407	59239
1934	117103	842859			101	104	114913	815156	7.1	8159	57876
1935	113239	899606			98	110	114662	818814	7.0	8026	57317
1936	117089	797795		797799	101	97	114411	822473	6.5	7437	53461
1937	113239	797795			98	97	114160	802505	6.0	6850	48150
1938	91815	629838			101	97	113909	782537	6.0	6835	46952
1939	91815	629838			101	97	113659	762569	6.0	6820	45754
1940	88755	629838			98	97	113407	742601	6.0	6804	44556
1941	91815	657594	114289	657594	101	91	113157	722631	6.0	6789	43358
1942	118060	704283			105	97	119781	726065	6.0	7187	43564
1943	118060	704283			105	97	126405	726065	5.9	7458	42838
1944	121838	797953			108	110	133030	725412	5.7	7583	41348
1945	127565	845032			113	117	139654	722250	5.7	7960	41168
1946	133305	882140		882140	118	123	146278	717187	5.6	8192	40162
1947	143436	974765			127	136	152902	703739	5.5	8410	38706
1948	151038	1141563			133	156	159526	690291	5.5	8774	37966
1949	160553	1141563			142	156	166151	676843	5.5	9138	37226
1950	166333	1236313			147	169	172775	663395	5.5	9503	36487
1951	175814	1331509	278068	1182905	155	182	179399	649948	5.6	10046	36397
1952	177748	1379443			157	188	179040	649948	5.7	10205	37047
1953	177748	1379443			167	185	168635	630450	5.7	9612	35936
1954	194291	1346146			172	188	178681	636299	5.7	10185	36269

\* Census, Interpolated, Extrapolated.

TABLE 2      SOURCES:    DOMINION BUREAU OF STATISTICS  
   OTTAWA

- (a) 1926-50: Quarterly Bulletin of Agricultural Statistics (preceded by Monthly Bulletin of Agricultural Statistics), In issues 1922-35 under heading "Gross Agricultural Wealth of Canada by Provinces," since 1936 under "Current Value of Farm Capital in Canada, by Provinces."
- 1951-54: Correspondence with Farm Finance Unit, Agricultural Division, (1951-53, courtesy of Dr. W. J. Anderson, Department of Agricultural Economics, The University of British Columbia).
- (b) 1921, 1931  
and 1941 (British Columbia): Eighth Census of Canada, 1941, Vol. VIII, Part II, p. 1593.
- 1921, 1926,  
1931, 1936,  
1941 and 1946: (Saskatchewan): Census of the Prairie Provinces, 1946, Vol. IV, p. 241.
- 1951: Ninth Census of Canada, 1951, Vol. VI, Part II, pp. 30-31.
- (c) Derived from "Average values per acre of occupied farm land," Quarterly Bulletin of Agricultural Statistics, Vol. 40, p. 31, Vol. 47, p. 4.
- (d) 1926-53: Correspondence with Dominion Bureau of Statistics, Prices Section (courtesy of Dr. W. J. Anderson, Department of Agricultural Economics, The University of British Columbia.)
- 1954: Carried forward.

TABLE 3 ESTIMATION OF ANNUAL LIVESTOCK INPUT, BRITISH COLUMBIA AND SASKATCHEWAN, 1926-1954

Year	Estimated (a)		(b)		Price Index		Deflated #		Rate of (d)		Livestock	
	Current Values		Census		Wholesale (c)		Livestock Values		Interest		Input	
	B.C.	Sask.	B.C.	Sask.	Animal Prod.	West. Can.	B.C.	Sask.	West. Can.		B.C.	Sask.
	'000	'000	'000	'000	1935-39=100		'000	'000			'000	'000
1921	-	162600	20458	196485	138		-	-			-	-
1926	23986	142921		140141	128		16853	109485	7.8		1315	8540
1927	28071	147543			128		17258	108894	7.3		1260	7949
1928	35259	154060			142		17664	108304	7.4		1307	8014
1929	37918	142986			149		18069	107713	7.5		1355	8078
1930	31963	120194			137		18475	107123	7.5		1386	8034
1931	19432	81727	17370	98009	92		18880	106532	7.6		1435	8096
1932	15767	68483			69		22851	105705	7.6		1737	8034
1933	16365	74340			68		24066	104878	7.3		1757	7656
1934	16911	77368			84		20132	104052	7.1		1429	7388
1935	18493	92205			93		19885	103225	7.0		1392	7226
1936	20689	97274		94206	92		22488	102398	6.5		1462	6656
1937	22237	91523			106		20978	96984	6.0		1259	5819
1938	22569	880461			105		21494	91570	6.0		1290	5494
1939	23576	95606			103		22889	86155	6.0		1373	5169
1940	26608	105456			109		24411	80751	6.0		1465	4844
1941	21054	96248	20646	95665	127		16257	75327	6.0		975	4520
1942	26283	133939			150		17522	73382	6.0		1051	4403
1943	37816	204551			171		22115	71438	5.9		1305	4215
1944	38899	209888			176		16420	69493	5.7		936	3961
1945	40295	193043			181		22262	67549	5.7		1269	3850
1946	41107	146393		125303	191		21522	65604	5.6		1205	3674
1947	43813	165552			212		20667	67351	5.5		1137	3704
1948	48624	173936			284		17121	69098	5.5		942	3800
1949	51134	186541			291		17572	70845	5.5		966	3896
1950	58117	206102			318		18276	72592	5.5		1005	3993
1951	73001	283329	71473	283233	381		18750	74339	5.6		1050	4163
1952	66506	257389			308		21593	83567	5.7		1231	4763
1953	60514	210404			281		21535	74877	5.7		1227	4268
1954	56175	179470			275		20427	65262	5.7		1164	3720

# Census, interpolated, extrapolated

TABLE 3 SOURCES: DOMINION BUREAU OF  
STATISTICS, OTTAWA

- (a) See (a) under Sources Table 2, 'Real Estate'.
- (b) See (b) under Sources Table 2, 'Real Estate'.
- (c) 1921: derived from the 'Wholesale Price Index of Animal Products' (Prices and Price Indexes, 1913-1940, 1942, P. 40) by shifting the base year (1926) of this series to 1935-39.  
  
1926-1951: Prices and Price Indexes, 1949-1952, P. 104.  
  
1952-1954: Correspondence, Dominion Bureau of Statistics, Ottawa, Prices Section.
- (d) See (d) under Sources Table 2, 'Real Estate'.



TABLE 4 - ESTIMATION OF MACHINERY AND IMPLEMENTS INPUTS, BRITISH COLUMBIA AND SASKATCHEWAN, 1926-1954

Year	Estimated (a) Current Values		(b) Census		Price Index Farm (c) Machinery	Deflated Value#		Rate of (d) Interest West. Can.	Input	
	B.C.	Sask.	B.C.	Sask.		B.C.	Sask.		B.C.	Sask.
	'000	'000	'000	'000	1935-39=100	'000	'000		'000	'000
1921	-	-	9379	176676	111	-	-		-	-
1926	9379	176676		169530	98	11007	172990	7.8	859	13493
1927	9379	176676			98	11518	177447	7.3	841	12954
1928	9379	176676			98	12030	181904	7.4	890	13461
1929	9379	176676			98	12541	186360	7.5	941	13977
1930	9379	176676			97	13053	190817	7.5	979	14311
1931	12886	185510	12885	185510	95	13564	195274	7.6	1031	14841
1932	12446	170611			94	13596	181501	7.6	1033	13794
1933	11839	158688			92	13627	172487	7.3	995	12592
1934	11283	147264			95	13659	155015	7.1	970	11006
1935	10915	137703			96	13690	143441	7.0	958	10041
1936	10699	131994		131095	98	13722	133770	6.5	892	8695
1937	10699	125382			97	13753	129260	6.0	825	7756
1938	10722	119844			104	13785	115235	6.0	827	6914
1939	10411	115673			103	13816	112304	6.0	829	6738
1940	10082	112615			106	13848	106241	6.0	831	6374
1941	10089	142754	15128	142754	109	13879	130967	6.0	833	7858
1942	15471	142812			114	15633	125274	6.0	938	7516
1943	15895	142375			117	17388	121688	5.9	1026	7180
1944	15755	135919			118	19142	115186	5.7	1091	6566
1945	16230	139529			115	20897	121330	5.7	1191	6916
1946	17131	223463		223463	119	22651	187784	5.6	1268	10516
1947	19345	233648			126	24405	206446	5.5	1343	11355
1948	22613	239758			142	26160	225108	5.5	1439	12381
1949	27398	270100			158	27914	243769	5.5	1535	13407
1950	32424	313107			166	29669	262431	5.5	1632	14434
1951	35184	355042	58760	525644	187	31423	281093	5.6	1760	15741
1952	38898	390558			196	32994	295148	5.7	1881	16823
1953	42299	440109			198	35822	328879	5.7	2042	18746
1954	44837	489664			199	37708	365421	5.7	2149	20829

# Census, interpolated, extrapolated.

TABLE 4                      SOURCES: DOMINION BUREAU OF  
STATISTICS, OTTAWA

- (a) See (a) under Sources Table 2, Real Estate.
- (b) See (b) under Sources Table 2, Real Estate.
- (c) 1926-1952:  
Canada, D.B.S., Labour and Prices Division,  
Prices and Price Indexes, 1949-1952, P. 98  
(British Columbia and Saskatchewan)  
  
1953 and 1954:  
Price Index Numbers of Commodities and Services  
Used by Farmers, April, 1955.
- (d) See (d) under Sources Table 2, Real Estate.

TABLE 5 A  
VALUES OF INPUTS AT CURRENT PRICES  
BRITISH COLUMBIA

Year	Cost Operating Farm Machinery (a)	Building Costs (b)	Machinery Costs (c)	Taxes (d)	Ferti- lizers (e)	Miscel- laneous (f)
1926	1292	1574	1091	1699	309	1840
1927	1566	1852	1123	1703	307	1956
1928	1795	1985	1189	1706	390	2106
1929	1994	2111	1271	1726	533	2141
1930	2032	1900	1236	1719	732	1971
1931	1893	1976	1198	1738	542	1619
1932	1721	1739	1183	1743	498	1210
1933	1608	1692	1169	1710	425	1277
1934	1706	1617	1174	1655	523	1409
1935	1690	1567	1188	1590	443	1443
1936	1750	1629	1213	1503	444	1534
1937	1814	1579	1255	1593	604	1820
1938	1858	1639	1298	1653	584	1751
1939	1889	1646	1337	1714	601	1830
1940	1952	1596	1386	1569	619	1917
1941	2153	1658	1427	1544	772	1989
1942	2399	1781	1697	1604	806	2179
1943	2564	1824	1864	1655	1051	2351
1944	2722	1949	2024	1940	1103	3013
1945	2854	2095	1832	2119	1218	3402
1946	3370	2513	2056	2358	1428	3699
1947	3929	2694	2490	3325	1431	4974
1948	5408	3055	2872	3597	1619	5426
1949	6377	3213	3386	4153	1581	5653
1950	7929	3351	3676	4947	1830	5969
1951	9561	4189	3845	5824	1814	6610
1952	10719	4810	4534	6464	2191	7227
1953	11802	5081	4517	7070	2482	6867
1954	12257	5209	4701	7898	2369	7079

TABLE 5 B  
VALUES OF INPUTS AT CURRENT PRICES  
SASKATCHEWAN

Year	Cost Operating Farm Machinery (a)	Building Costs (b)	Machinery Costs (c)	Taxes (d)	Ferti- lizers (e)	Miscel- laneous (f)
1926	13622	8913	24949	18247	25	12063
1927	15596	9804	27047	18095	17	13066
1928	17242	10796	29507	18877	21	13277
1929	18847	10627	31146	19733	18	9866
1930	18733	9974	29541	19655	10	10056
1931	16294	9207	23463	17414	53	6352
1932	15310	7681	22776	15468	147	5842
1933	14434	7612	21196	13312	72	4840
1934	15955	7546	20267	13587	121	5293
1935	15560	7955	20395	14359	246	6035
1936	16205	6967	19246	14336	190	5604
1937	16002	6696	18174	13057	146	4659
1938	15698	6428	19322	13731	168	6096
1939	16947	6161	20529	14455	139	7394
1940	18544	5894	20833	13836	197	7943
1941	20788	5263	21626	14304	198	7180
1942	23864	5975	25977	14733	180	12316
1943	25498	6267	28758	15070	156	9879
1944	29169	7311	31812	15462	218	11978
1945	33906	8071	35057	15631	604	11026
1946	38630	9762	38462	18556	656	11466
1947	42838	10676	38578	20097	964	13508
1948	49676	12585	41892	22661	1265	14830
1949	55428	12744	46160	23510	1776	15471
1950	60891	13647	49431	24520	2443	15324
1951	61893	16763	54361	26727	2973	17801
1952	69878	19098	61111	28330	2783	19401
1953	71959	19920	67127	31582	3572	17651
1954	76368	19818	72662	32759	2788	15834

TABLE 5      SOURCES:    DOMINION BUREAU OF  
                                 STATISTICS, OTTAWA

(a) 1926-48: Handbook of Agricultural Statistics,  
Part II, Farm Income, Pp. 70-71,  
74-75.

1949-54: Farm Net Income, 1951, 1952, 1953  
and 1954.

(b) i. Yearly depreciation of buildings:  
1926-54: correspondence with D.B.S.,  
Agricultural Division (1926-53, courtesy  
Dr. W. J. Anderson, Department of Agricul-  
tural Economics, University of British  
Columbia).

ii. Repairs, See (a) above.

(c) See (b) above.  
(Note: Farm Net Income, 1952 gives \$2406 for  
the 1950 figure of machinery repairs in  
British Columbia. This has been assumed to  
be a typographical error and \$1406 has been  
considered to be the correct estimate.

(d) Taxes on Owned Land and Buildings, see (a)  
above.

(e) See (a) above.

(f) See (a) above.

**TABLE 6**  
**PRICE INDEX NUMBERS OF COMMODITIES USED BY FARMERS IN WESTERN CANADA**  
**1935-39 = 100**

Year	Interest Rate Farm Mortgages (a)	Gas, Oil & Grease (b)	Building Material (c)	Farm Machinery (d)	Tax Rate (e)	Ferti- lizer (f)	Hardware (g)
1926	124	123	114	98	157	129	106
1927	116	116	108	98	152	129	104
1928	118	109	115	98	160	121	108
1929	119	110	117	98	153	120	104
1930	119	110	102	97	144	114	101
1931	121	103	88	95	123	107	102
1932	121	108	80	94	114	94	100
1933	116	105	85	92	94	96	93
1934	113	109	88	95	93	98	95
1935	111	106	87	96	93	97	96
1936	103	105	97	98	94	100	97
1937	95	100	109	97	99	100	103
1938	95	96	99	104	108	102	104
1939	95	94	108	103	109	101	101
1940	95	92	116	106	113	101	109
1941	95	99	128	109	117	104	111
1942	95	105	148	114	120	104	121
1943	94	106	154	117	127	103	122
1944	91	106	173	118	140	103	121
1945	90	105	176	115	148	103	121
1946	88	109	175	119	166	103	121
1947	88	115	189	126	175	105	130
1948	87	130	234	142	185	116	153
1949	87	132	251	158	199	126	167
1950	87	137	280	166	210	132	170
1951	88	136	327	187	218	154	190
1952	91	138	332	196	233	163	209
1953	91	139	339	198	245	166	208
1954	91	141	337	199	258	177	208

TABLE 6      SOURCES:    Dominion Bureau of  
                                 Statistics, Ottawa

- (a) 1926-54:    Correspondence with D.B.S., Prices  
                 Section (1926-53 courtesy of Dr. W.  
                 J. Anderson, Department of Agricultural  
                 Economics, University of British  
                 Columbia.
- (b) 1926-52:    Prices and Price Indexes, 1949-1952,  
                 P. 98.
- 1953 and 1954: Price Index Numbers of  
                         Commodities and Services used by  
                         Farmers, April, 1955.
- (c) See (b) above.
- (d) See (c) under Sources, Table 4, 'Machinery and  
         Implements'.
- (e) 1926-53:    Courtesy Dr. W. J. Anderson, Department  
                 of Agricultural Economics, University  
                 of British Columbia.
- 1954:            carried forward.
- (f) See (b) above.
- (g) See (b) above.

TABLE 7

VALUE OF INPUTS AT 1935-39 PRICES  
In Thousands of Dollars

BRITISH COLUMBIA

Year	Labour	Real Estate	Live- stock	Implements Machinery	Cost Farm	Operating Machinery	Building Costs
1926	19656	6257	1060	693		1050	1381
1927	20160	6464	1086	725		1350	1715
1928	20664	6644	1108	754		1647	1726
1929	21168	6882	1139	791		1813	1804
1930	21672	7086	1165	823		1847	1863
1931	22176	7265	1186	852		1838	2245
1932	21672	7249	1436	854		1594	2174
1933	21672	7247	1515	858		1531	1991
1934	22176	7220	1265	858		1565	1837
1935	22176	7231	1254	863		1594	1801
1936	22176	7220	1419	866		1667	1679
1937	22176	7221	1325	868		1814	1449
1938	22176	7195	1358	871		1935	1656
1939	22680	7179	1445	873		2010	1526
1940	22176	7162	1542	875		2099	1376
1941	21168	7146	1026	877		2175	1295
1942	19656	7565	1106	987		2285	1203
1943	18144	7934	1388	1091		2419	1184
1944	18648	8333	1029	1199		2568	1127
1945	17136	8844	1410	1323		2719	1190
1946	16632	9309	1369	1441		3092	1436
1947	19152	9557	1292	1526		3417	1425
1948	20160	10085	1083	1654		4160	1306
1949	19656	10503	1110	1764		4831	1280
1950	13608	10923	1155	1876		5788	1197
1951	14616	11416	1193	2000		7030	1281
1952	12096	11215	1353	2090		7767	1449
1953	10584	10563	1348	2244		8491	1499
1954	9072	11192	1279	2362		8693	1546



TABLE 7 (cont'd)

Machinery Costs	Taxes	Ferti- lizers	Miscel- laneous	Total	Sub Total# Real Estate	Sub Total## Impl.&Mach.
1113	1082	240	1736	34268	8720	2856
1146	1120	238	1881	35885	9299	3221
1213	1066	322	1950	37094	9436	3614
1297	1128	444	2059	38525	9814	3901
1274	1194	642	1951	39517	10143	3944
1261	1413	507	1587	40330	10923	3951
1259	1529	530	1210	39507	10952	3707
1271	1819	443	1373	39720	11057	3660
1236	1780	534	1483	39954	10837	3659
1238	1710	457	1503	39827	10742	3695
1238	1599	444	1581	39889	10498	3771
1294	1609	604	1767	40117	10269	3976
1248	1531	573	1684	40227	10382	4054
1298	1572	595	1812	40990	10277	4181
1308	1388	613	1759	40298	9926	4282
1309	1320	742	1792	38850	9761	4361
1489	1337	775	1801	38204	10105	4761
1593	1303	1020	1927	38003	10421	5103
1715	1386	1071	2490	39566	10846	5482
1593	1432	1183	2812	39642	11466	5635
1728	1420	1386	3057	40870	12165	6261
1976	1900	1363	3826	45434	12882	6919
2023	1944	1396	3546	47357	13335	7837
2143	2087	1255	3385	48014	13870	8738
2214	2356	1386	3511	44014	14476	9878
2056	2672	1178	3479	46921	15369	11086
2313	2774	1344	3458	45859	15438	12170
2281	2886	1495	3301	44692	14948	13016
2362	3061	1338	3403	44308	15799	13417

# Real Estate plus Building Costs plus Taxes.

## Implements and Machinery plus Cost of Operating  
Farm Machinery plus Machinery Costs.

TABLE 8

VALUE OF INPUTS AT 1935-39 PRICES  
In Thousands of Dollars

SASKATCHEWAN

Year	Labour	Real Estate	Live-stock	Implements Machinery	Cost Operating Farm Machinery	Building Costs
1926	67284	40137	6887	10881	11075	7818
1927	68352	42246	6853	11167	13402	9078
1928	69420	44182	6792	11408	15818	9388
1929	70488	46497	6788	11745	17134	9083
1930	71556	48590	6751	12026	17030	9778
1931	72624	50511	6691	12265	15819	10462
1932	74048	50740	6640	11400	14176	9601
1933	74760	51068	6600	10855	13747	8955
1934	75472	51218	6538	9740	14638	8575
1935	76540	51637	6510	9046	14679	9144
1936	77252	51904	6462	8442	15433	7182
1937	75116	50684	6125	8164	16002	6143
1938	73336	49423	5783	7278	16532	6493
1939	71200	48162	5441	7093	18029	5705
1940	69776	46901	5099	6709	19940	5081
1941	66572	45640	4758	8272	20998	4112
1942	64792	45857	4635	7912	22728	4037
1943	62656	45572	4484	7638	24055	4069
1944	60164	45437	4353	7215	27518	4226
1945	59096	45742	4278	7684	32291	4586
1946	58028	45639	4175	11950	35440	5547
1947	57672	43984	4209	12903	37250	5649
1948	55536	43639	4368	14231	38212	5378
1949	54112	42789	4478	15410	41991	5077
1950	53756	41939	4590	16591	44446	4874
1951	52688	41368	4741	17888	45510	5126
1952	51620	40710	5234	18692	50636	5752
1953	48416	39490	4690	20600	51769	5876
1954	50196	39856	4088	22889	54162	5881

TABLE 8 (cont'd)

Machinery Costs	Taxes	Ferti- lizers	Miscel- laneous	Total	Sub Total# Real Estate	Sub Total## Impl.& Mach.
25458	11622	19	11380	192561	59577	47414
27599	11905	13	12563	203178	63229	52168
30109	11798	17	12294	211226	65368	57335
31782	12897	15	9487	215916	68477	60661
30455	13649	9	9956	219800	72017	59511
24698	14158	50	6227	213505	75131	52782
24230	13568	156	5842	210410	73909	49806
23039	14161	75	5204	208464	74184	47641
21334	14610	124	5572	207821	74403	45712
21245	15440	254	6286	210781	76221	44970
19639	15251	190	5777	207532	74337	43514
18736	13189	146	4523	198828	70016	42902
18579	12714	165	5862	196165	68630	42389
19931	13261	138	7321	196281	67128	45053
19654	12244	195	7287	192886	64226	46303
19840	12226	190	6468	189076	61978	49110
22789	12278	173	10179	195378	62172	53427
24579	11866	151	8098	193168	61507	56272
26959	11044	212	9899	197027	60707	61692
30484	10561	586	9122	204430	60889	70459
32321	11178	637	9476	214391	62364	79711
30617	11484	918	10391	215077	61117	80770
29501	12249	1091	9693	213898	61266	81944
29215	11814	1410	9264	215560	59680	86616
29778	11676	1851	9014	218515	58489	90815
29070	12260	1931	9369	219941	58754	92468
31179	12159	1707	9283	226972	58621	100507
33903	12891	2152	8486	228273	58257	106272
36514	12697	1575	7613	235471	58434	113565

# Real Estate plus Building Costs plus Taxes.

## Implements and Machinery plus Cost of Operating  
Farm Machinery plus Machinery Costs.

TABLE 9 A

VALUES OF OUTPUTS AT CURRENT PRICES  
In Thousands of Dollars

BRITISH COLUMBIA

Year	Field Crops (a)	Livestock (b)	Forest Products (c)	House Rent (d)
1926	10364	17704	1268	2016
1927	9512	19392	1268	2350
1928	9637	23827	1288	2522
1929	10214	23387	1288	2693
1930	10258	17528	1201	2469
1931	6721	13933	1154	2590
1932	6731	10957	1038	2315
1933	8416	12754	1007	2252
1934	8625	12686	1014	2157
1935	9033	14319	1046	2090
1936	9102	16450	1129	2146
1937	10495	16981	1140	2104
1938	10675	17916	1083	2186
1939	11691	18320	1127	2203
1940	11330	20045	931	2124
1941	13138	26243	980	2192
1942	14053	27718	972	2266
1943	20565	37698	1571	2273
1944	23697	36605	1778	2388
1945	24662	40750	1868	2512
1946	32765	40436	2125	2651
1947	25160	49544	2870	2969
1948	26722	58130	3344	3146
1949	29266	57209	3214	3399
1950	19593	60185	3776	3628
1951	12741	78491	4515	3927
1952	13807	71854	4386	4067
1953	19809	71285	3957	4354
1954	12946	75002	3937	4592

TABLE 9 B

VALUES OF OUTPUTS AT CURRENT PRICES  
In Thousands of Dollars

SASKATCHEWAN

Year	Field Crops (a)	Livestock (b)	Forest Products (c)	House Rent (d)
1926	254087	48074	1677	10748
1927	270533	43472	1610	11838
1928	282979	46602	1572	13052
1929	133086	55363	1604	12866
1930	107663	42253	1590	12091
1931	27528	36980	1711	11190
1932	69213	24299	1411	9471
1933	52215	25938	1394	9524
1934	59972	33009	1482	9583
1935	86346	37614	1701	10254
1936	68437	42559	1716	9106
1937	12804	39694	1758	8928
1938	86668	32377	1813	8743
1939	157659	45540	1841	8555
1940	134237	57051	1858	8360
1941	74990	77766	1571	7613
1942	293462	113993	1608	8338
1943	114129	168650	2410	8493
1944	326314	176063	2382	9786
1945	197977	134480	2426	10510
1946	283101	80634	2922	11234
1947	289712	132038	3493	12414
1948	397784	155902	3946	14189
1949	414781	161881	3974	14189
1950	335638	154776	4220	15368
1951	609835	199213	4769	16559
1952	712216	156975	4720	17143
1953	620065	134748	4688	17739
1954	234319	147902	4668	17143

TABLE 9      SOURCES:    DOMINION BUREAU OF  
                                 STATISTICS, OTTAWA

- (a)    i.    Cash Income -  
          1926-48: Handbook of Agricultural Statistics,  
                          Part II, Farm Income, Reference  
                          Paper No. 25, Pp. 40-41 and 44-45.  
          1949-54: Farm Cash Income, 1951, 1952, 1953  
                          and 1954.
- ii.    Income in kind -  
              1926-48: Handbook of Agricultural Statistics,  
                          Part II, Farm Income, Reference  
                          Paper No. 25, Pp. 53 and 55.  
              1949-54: Farm Net Income, 1951, 1952, 1953  
                          and 1954.
- iii.    Feed and seed expenses -  
              1926-48: Handbook of Agricultural Statistics,  
                          Part II, Farm Income, Reference  
                          Paper No. 25, Pp. 70 and 74.  
              1949-54: Farm Net Income, 1951, 1952, 1953  
                          and 1954.
- iv.    Changes in inventory -  
              1926-54: Correspondence with D.B.S.,  
                          Agricultural Division (courtesy  
                          Dr. W. J. Anderson, Department of  
                          Agricultural Economics, University  
                          of British Columbia.
- (b)    See (a) i, ii, and iv, above.
- (c)    See (a) i, and ii, above.
- (d)    See (a) ii above.

TABLE 10

WHOLESALE PRICE INDEX NUMBERS OF FARM OUTPUTS

IN WESTERN CANADA, 1926-1954

(1935-39 = 100)

Year	Field Products (a)	Animal Products (b)	Lumber and Timber (c)	Bldg. Material, Tax and Interest Rates (d)
1926	147	128	112	128
1927	148	128	109	122
1928	136	142	116	128
1929	138	149	118	127
1930	96	137	100	118
1931	58	92	84	105
1932	56	69	75	98
1933	63	68	78	95
1934	76	84	87	95
1935	84	93	86	94
1936	98	92	97	98
1937	134	106	110	103
1938	106	105	99	100
1939	78	103	106	105
1940	81	109	118	110
1941	83	127	137	118
1942	97	150	153	128
1943	119	171	170	133
1944	144	176	184	146
1945	163	181	185	149
1946	187	191	198	153
1947	191	212	263	162
1948	196	284	330	188
1949	193	291	349	200
1950	195	318	388	218
1951	196	381	457	244
1952	194	308	438	251
1953	178	281	419	258
1954	157	275	419	260

TABLE 10      SOURCES:    DOMINION BUREAU OF  
                                 STATISTICS, OTTAWA

- (a) 1926-51: Prices and Price Indexes, 1949-1952,  
                  P. 104.
- 1952-54: Correspondence with D.B.S., Prices  
                  Section.
- (b) See (a) above.
- (c) 1926-51: Prices and Price Indexes, 1949-1952,  
                  P. 32.
- 1953-54: Prices and Price Indexes, monthly.
- (d) 1926-52: Prices and Price Indexes, 1949-52,  
                  Pp. 95 and 98.
- 1953-54: Price Index Numbers of Commodities  
                  and Services Used by Farmers,  
                  April, 1955.



TABLE 11 A  
VALUE OF OUTPUT AT 1935-39 PRICES  
BRITISH COLUMBIA

Year	Field Crops	Live- stock	Forest Products	House Rent	Total Output
1926	7054	13831	1132	1575	23592
1927	6427	15150	1163	1926	24666
1928	7086	16780	1110	1970	26946
1929	7401	15696	1092	2120	26309
1930	10685	12794	1201	2092	26772
1931	11588	15145	1374	2467	30574
1932	12020	15735	1384	2353	31492
1933	13343	18756	1291	2378	35768
1934	11349	15102	1166	2273	29890
1935	10754	15397	1216	2226	29593
1936	9288	17880	1164	2201	30533
1937	7832	26020	1036	2043	26931
1938	10071	17063	1094	2186	30414
1939	14988	17786	1063	2098	35935
1940	13988	18390	789	1931	35098
1941	15829	20664	715	1858	39066
1942	14488	18479	635	1770	35372
1943	17282	22045	924	1709	41960
1944	16456	20798	966	1636	39856
1945	15130	22514	1010	1686	40340
1946	17521	21171	1073	1733	41498
1947	13173	23370	1091	1833	39467
1948	13634	20468	1013	1673	36788
1949	15164	19659	920	1700	37443
1950	10048	18926	973	1664	31611
1951	6501	20601	988	1609	29699
1952	7117	23329	1001	1620	33067
1953	11286	25368	944	1699	39286
1954	8246	27273	940	1766	38225

TABLE 11 B  
VALUE OF OUTPUT AT 1935-39 PRICES  
SASKATCHEWAN

Year	Field Crops	Live- stock	Forest Products	House Rent	Total Output
1926	172848	37558	1497	8397	220300
1927	182793	33963	1477	9703	227936
1928	203073	32818	1355	10197	247443
1929	96439	37156	1359	10131	145085
1930	112149	30842	1590	10247	154828
1931	47462	40196	2013	10657	100328
1932	123595	35216	1881	9664	170356
1933	82722	38144	1787	10025	132728
1934	78911	39296	1703	10087	129997
1935	102793	40445	1978	10909	156125
1936	69834	46260	1769	9292	127155
1937	9555	37447	1598	8668	57268
1938	81762	30835	1831	8743	123171
1939	202127	44214	1737	8148	256226
1940	165724	52340	1561	7600	227225
1941	90349	61233	1147	6452	159181
1942	302538	75995	1051	6514	386098
1943	95907	98626	1418	6386	202337
1944	226607	100036	1295	6703	334641
1945	121458	74298	1311	7054	204121
1946	151391	42217	1476	7342	202426
1947	151682	62282	1333	7663	222960
1948	202951	54895	1196	7547	266589
1949	214912	55629	1139	7095	278775
1950	172122	48672	1088	7050	228932
1951	311140	52287	1044	6786	371253
1952	367121	50966	1078	6830	425995
1953	348351	47953	1119	6876	404299
1954	149248	53783	1114	6593	210738

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