SOME FACTORS MAKING FOR THE SUCCESS OR FAILURE OF AGRICULTURE IN B. C.

BY

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SOME FACTORS MAKING FOR THE SUCCESS OR FAILURE

OF AGRICULTURE IN BRITISH COLUMBIA

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SOME FACTORS MAKING FOR THE SUCCESS OR FAILURE OF AGRICULTURE IN BRITISH COLUMBIA.

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SOME FACTORS WHICH MAKE FOR THE SUCCESS OR FAILURE OF AGRICULTURAL IN BRITISH COLUMBIA.

Foreword - During the past few years a great many complaints have been made by the farmers of British Columbia. They claim that in spite of the great natural advantages that they enjoy they are unable to make any profit out of their farms; that the majority have had difficulty in making ends meet at all. Agriculture in this Province is generally conceded to be an unprofitable occupation. The purpose of this essay is to discover, if possible, how much truth there is in these reports, and to find out what are the factors leading to success or failure.

Time and space prevent an adequate treatment of all the factors involved: Besides a discussion of each of the types of farming, the particular problems of co-operation, and the high value of the land, are only ones to which a separate chapter is devoted. The problem of Protection and the closely allied question of Freight Rates, meant individual treatment but have received only a cursory mention at the end.
INTRODUCTORY.

Chapter 1.

The Province of British Columbia is bounded by the United States on the south, Alberta on the east, Yukon and Alaska on the north, and the Pacific Ocean on the west. At present it occupies a rather out of the way position with respect to world markets, but in the future, when trade with the Orient assumes greater importance, British Columbia will have a very favorable situation.

The Province is some seven hundred miles long by five hundred wide, and has a population of 524,582 people, not quite 2 people per square mile. As regards occupation 12.7% of the population are engaged in agriculture as compared to 1618% in forestry, fishing and mining, the other extractive industries.

There are three great mountain ranges; the Rockies in the east, the Selkirks about seventy miles west of the Rockies, and the Coast Range. Between the Selkirks and the Coast Range there is a great Central Plateau. As might be expected climatic conditions vary greatly. There are however three main zones. In the Coast district the climate is mild and equable with few extremes of heat or cold and with a heavy rainfall. In the dry belts of the interior such as the Kootenay and Okanagan Valleys, there is much less rainfall and there are greater extremes of temperature. In the eastern districts which on the whole are mountainous, one finds

(1) Canadian Year Book 1923.
cooler summers and cold winters with very heavy snowfalls.

Farming is carried on in the Interior on the Plateaux and in the valleys, along the Coast on the deltas at the mouths of rivers, and on Vancouver Island. The type of farming varies with the location and the kind of soil, which depends rather upon the geological formation of the land than upon the locality. There are soils in B. C. suited to practically any crop. There are 50,000,000 acres of land suitable for some kind of agriculture but about half of this is only fit for pastoral purposes. Of the remaining 25,000,000 acres, 2,000,000 are well fitted for fruit growing. This land is situated in specialized districts, and only in Central B. C. is general farming carried on. Up the Fraser Valley there are numerous dairy farms, while small fruits are produced at Maple Ridge, strawberries in particular at Saanich, and poultry farms are centered at Duncan and Hammond.

Because his land is very new the B. C. farmer has many special difficulties to face in developing it. A series of problems in engineering confront him at the outset. The land must be cleared, the stumps removed by burning or blasting, and in many cases drainage is necessary, while in still others the land is utterly useless without some sort of irrigation, and in these cases water is usually difficult to obtain. These are some of the factors which make the cost of improved land so high.

Agriculture is very important as an industry in
B. C. It is ranked as follows:

Values of net production:  
- Forestry: 27.9%  
- Agriculture: 17.8%  
- Mining: 17.2%  
- Fisheries: 9.8%  

Agriculture stands second, having produced $59,159,798.00 worth in 1923, the last year for which figures are available.

The importance of agriculture to B.C. cannot be denied, and a situation which shows that those engaged in it are unsuccessful should be regarded by the government as a menace to the welfare of the people of the Province.

(1) Canadian Year Book 1923.
Chapter 2.

Agriculture throughout the world has just passed through a period of very serious depression, which has resulted in greater demands from the farmers. Agriculture lists are reclaiming that position of importance in national affairs which they consider rightfully theirs.

With the exception of a few predominantly agricultural countries such as Denmark, the coming of the Industrial Revolution resulted everywhere in the subordination of agriculture to manufacturing. Under the domestic system agriculture and manufacturing were carried on at home by the members of the family working side by side. With the introduction of the factory system a great part of the population moved from the country into the city, where work was organized and specialized according to the principle of the Division of Labor. As the productive powers of the world decreased, so the standard of wants was raised. The original products of the land, the forests, the mines, and the sea demanded more and more treatment before they satisfied the more fastidious desires of the people. Therefore it is not surprising that manufacturing gained an ever increasing importance, and the rights and interests of the manufacturers were considered before those of the farmers.

The farmers as a class are conservative and individualistic. Their work is largely solitary; they do not
labor side by side with their fellow men, neither do they live in congested districts where any new idea spreads rapidly through the whole community. The principle of laissez-faire appeals very strongly to the farmer; and his work makes him independent and he wishes to remain so, but in spite of himself he has been influenced by the great changes in economic organisation. Formerly each farm was more or less self-sufficient. Each man produced what was needed to support himself and his family. If he had any surplus he took it to the nearest town and there marketed it. But the enormous development of transportation and the improvement in agricultural methods have changed all this. The farmer of today finds that he can buy most of the things he needs, far more cheaply than he can produce them, therefore he tends to spend his time in producing those commodities which he can sell to best advantage. As soon as he has a surplus for sale he comes into contact with the business world, and is affected by all the crises and depressions as well as the prosperity and booms which characterise it. When he tries to sell his fruit for example, in the nearest market, he finds that it must compete with other fruit produced in distant parts of the world. He has become a specialist, first in agriculture and secondly in one branch of agriculture, and as such is simply one member of the fruit growing industry of the whole world. The principle of the Division of Labor has been extended to agriculture. The market is no longer local, it is world wide;
the selfsufficing unit is not the family but the world.

The application of the principle of specialization to agriculture has led to the danger of local overproduction. Farmers as a whole have adopted industrial methods to the extent of specialization, but they have not gone further and applied those methods to marketing. In consequence each individual farmer seeks to sell his product in the most convenient market, and as he has not the knowledge of what is needed he frequently sends it to one already glutted. As a result of this unorganized marketing one finds overproduction in some districts while there is an actual shortage in others, and this involves loss, not only to the farmer but to the world as a whole.

Another danger which is confronting some countries today is that of underproduction. The gloomy prophecies of Malthus at the end of the eighteenth century were forgotten for a time in the optimism of the nineteenth, when improvements both in agricultural and industrial methods seemed to show that that productive powers of the world could be indefinitely increased. But there are some who believe that the evil day has only been postponed, and that unless steps are taken to organize and increase agricultural production, it will be difficult to feed a fast increasing population.

The difficulties experienced by the farmers in adjusting themselves to the new economic situation, and a gradual realization on the part of governments that agriculture
is of fundamental importance, have led to a greater consideration of the interests of the farming class, during the last few years. Governments everywhere are seeking to promote the success of agriculture by the establishment of special departments, by the collection and publication of statistics, by establishing experimental farms, and by spreading increasing facilities for education and technical training.

But no matter how good a government's policy may be, the farmers' salvation lies almost entirely in their own hands. They must adjust themselves to new conditions and develop new methods. Farmers as a rule are afraid to cooperate because they fear to lose their cherished independence. What is needed is not less independence but more. Where formerly they left the business of distribution largely in the hands of brokers and middlemen, the farmers must now undertake the distribution of their product themselves. The great factor in production is management and that no government can give; it depends on the individual. Hitherto farming has been a means of making a living, and little else; now it has become a specialized business, and as such needs the introduction of business methods sadly lacking in the past. The comparative advantages of large and small scale farms, the most economical application of labor and capital, beside the technical methods of production, are all problems which must be met and handled in a business-like fashion. Agriculture must be brought up to date if it is ever to regain its rightful importance; the
methods which have long proved successful in industry must be applied to farming.

It should be remembered, however, that farming differs widely from other occupations in some respects. "On the farm, the home is part of the business and the business a part of the home." Steps which might not be considered profitable in any other enterprise are satisfactory to the farmer because they add to the comfort and advantages of his home. On the other hand, many undertakings which might be deemed desirable in any ordinary business are not good when farming because of the different circumstances. As a rule the farm which is most economical in size is the one which can be adequately managed by the operator with the aid of his family. In most occupations the members of a family have nothing to do with one another during businesshours; on a farm they have the same aims, the same interest, and frequently work side by side. The family rather than the individual still tends to be the producing unit in agriculture, and in this it differs materially from any other industry. The mere existence of the farm as a "going concern" will provide subsistence for the family, while in any other occupation very low wages or none at all lead to starvation.

The eighteenth century inaugurated the Industrial Revolution; the nineteenth century revolutionized methods in Agriculture, it remains for the twentieth to complete that

revolution by placing Agriculture on a firm well organised basis that will enable it to regain its lost importance.
Chapter 2.

Poultry farming in B. C. is carried on largely along the Coast, up the Fraser Valley, and on Vancouver Island. There are also a few flourishing farms in the interior near the larger towns. The first necessity for poultry farms is an accessible market, and their growth may therefore be expected near any large centre of population. Vancouver and the other Coast cities absorb by far the largest part of the eggs produced, but there is a surplus which constitutes the chief problem of poultrymen today.

There are two distinct types of poultry farming. The first, and at present the most important, is the business of egg producing. Many of the farmers buy their feed and baby chicks and devote all their time to production of eggs for the domestic and export trade. There is however another type of farmer who specializes in the breeding of the best strains of birds, and this sideline, entered into at first with the sole intention of improving production, bids fair to become the most important of the two branches of poultry farming.

1. The Egg Producing Farms.

These farms grow with their markets. The farmer must be able to obtain his baby chicks early in the spring, and be near a market where he can sell his fresh eggs. The export trade is merely incidental and is the result of a surplus of eggs during the months of greatest production.
Poultry farms in B. C. are almost always operated by their owners for the following reasons: First, it has been a very popular form of occupation among returned soldiers who are assisted by the Soldiers Settlement Board. Second, it is a type of farming comparatively easy to finance as there is less initial expenditure required, and the stock multiplies more quickly and yields a return sooner than on other kinds of farms. Third, B. C. poultry-men include a large number of men with capital who deliberately sought out their holdings. Fourth, it requires a large part of the total investment to be in buildings which are not suitable for other purposes, and in consequence landlords refuse to invest money in them and they must be bought outright. On the average, statistics show that 48% of the total investment is in land as against 52% in buildings. The dwelling represents approximately 25% of the total investment. The large percentage invested in buildings is an unfortunate factor in poultry farming, for buildings are subject to constant depreciation, whereas land values may be expected to increase, and the poultryman has a comparatively small percentage of his investment in land.

The period of depression following the war affected the poultry industry later than most others. Figures show that the year 1922 was a good one. Prices were high and returns on the whole good, and there was as a result a period of expansion. Farmers enlarged their flocks and there was a 22% increase in the number of birds. Overproduction in 1923 was followed by a period of great depression, prices were much
lower, and many of the marginal men were forced out of business. The average feed cost per flock rose from $272.29 in 1922 to $1661.00 in 1923, the average net revenue fell from $1026.63 to $830.00 while the income received by the operator in return for his labor fell from $586.85 in 1922 to $311.00 in 1923, that is: from about $49.00 per month to $26.00 per month. Of the hundred farms surveyed in 1922, 15 received a minus labor income, getting no return at all for the operator's labor while of the 94 included in the 1922 survey, 25 received a minus labor income (1). In 1924 conditions improved somewhat. Net revenue averaged $1226.35 while the operator's income was $685.36 or approximately $57.00 per month. Only 11 of a total of 80 farms surveyed received a minus labor income; stated in percentages results are as follows:

**Farms Receiving Minus Labour Incomes.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1921</td>
<td>22%</td>
</tr>
<tr>
<td>1922</td>
<td>15%</td>
</tr>
<tr>
<td>1923</td>
<td>25%</td>
</tr>
<tr>
<td>1924</td>
<td>12%</td>
</tr>
</tbody>
</table>

In 1923 15% of the farms went out of business, and 6% reduced production to one half. Of the remainder, in 1924 5% doubled production, 5% increased it by 1, and 22% by 1/4. At the same time the number of laying birds increased 11%.

The size of the farm and the amount of the total investment has a very important effect on profits and labor income. The average total investment today is about $6000.00

(1) These figures allow for interest on the investment at the rate of 7%.
and farms with from 600 to 800 birds seem to pay best. One reason why labor incomes are so low is that the average farm is not large enough to provide employment for the owner all the year round. It is not wise to have too much land; from five to fifteen acres gives sufficient opportunity for development. Beyond this size labor incomes rapidly diminish again as there is too much land for profitable management by one man.

It cannot be too much emphasized that the most important factor in poultry farming is the ability of the farmer himself as breeder, feeder, and business manager. It is advisable to eliminate extra labor wherever possible by the installation of labor saving machinery; it is unwise to invest money in unproductive equipment, and above all in too much land. Land is very expensive, its average value in poultry farms being $205.00 per acre. The average value of buildings per acre is approximately $216.00 making a total investment of $421.00 per acre.. If all other factors are equal, profits should increase as the flock increases, but this does not necessarily follow. Success or failure whether on a big farm or a small depends on the operator, and on the proportion in which he combines his land and capital goods.

In spite of the rather dismal figures hitherto quoted, the Poultry Industry in B. C. has many advantages which make for future success. To begin with the industry is very highly specialized, the proportion of the total receipts derived from poultry being around 80%. This specialization
gives B. C. an advantage in the production of eggs of a uniform and standardized quality. Secondly the climate is excellent. Its mildness makes it possible to produce eggs practically all the year round, notably during the months of November and December when it is difficult to get eggs in countries with a more extreme climate. B. C. also has the most advanced legislation dealing with eggs among all the Provinces of the Dominion, and Canada leads the world in her laws and regulations governing egg production. Dominion legislation insists on strict grading of eggs according to certain standards, and this makes it possible for the "B. C. Fresh" eggs to be recognized everywhere in Canada as of superior quality. The egg regulations protect the consumer, who is thereby enabled to demand the best eggs and be sure of getting them. Unfortunately for B. C. producers, the prairie and eastern provinces have not yet been educated to the point of appreciating a really fresh egg, a luxury they comparatively seldom enjoy. Hence they are not so particular as the B. C. Poultrymen could wish.

B. C. has supplemented the Dominion legislation by the Egg Marks Act first passed in 1917, amended in 1919 and again in 1925. This endeavours to protect the home market against invasion by lower quality eggs from the United States and China. The act provides that all eggs coming into the B. C. market must be marked with the name of the country of origin. This requirement is successful in keeping out most foreign eggs, as it adds about 1½ per dozen to the cost, which practically
amounts to an addition of 1\pounds to the 5\pounds tariff already in force. B.C. producers would like the Dominion Government to enforce a similar regulation throughout Canada, but are unable as yet to gain the support of the people in the East who are not used to strictly fresh eggs and therefore do not object to those of poorer quality which come in from other countries.

After production the chief concern of the poultry farmer is his market. In B.C. there is a fairly stable home market the year round. Local consumption of eggs is increasing, partly because of an increasing population, and partly because of the Dominion grading regulations which ensure the consumer the best quality eggs. But at the same time there is a surplus of eggs for export during part of the year. In the summer eggs are imported and during December, January, February and early March there is an exporting surplus. From November 15th to March 15th, the C.P.R. grants reduced express rates, and favourable freight rates on carloads of eggs shipped East. This is a good season to ship, but in the prairie and eastern markets B.C. eggs must compete with those of lower quality imported from the United States and China. The Winnipeg and Montreal markets are afraid of buying B.C. eggs because of the long haul which gives time for United States eggs to flood the market and cut prices. Competition is therefore very severe in spite of the fact that B.C. eggs are of a superior quality. Competition in the East tends to prevent the export of eggs and this floods the home market and cuts prices in Vancouver.

The egg producer points to the fact that the tariff
on eggs entering Canada is only 3¢ whereas eggs entering the
United States must pay 8¢. This exorbitant duty prevents B.C.
producers from taking advantage of the markets of New York and
other American cities which are the salvation of Western egg
producers of the United States. At the same time our more moder-
ate duty permits the dumping of inferior quality eggs in Canada.
The B.C. poultryman is not demanding protection against the
importation of superior quality eggs. In that respect he feels
that his product can hold its own. The demands, however, have
some protection against the inferior eggs shipped into Eastern
markets. He would like to see the extension of the principle
of the B.C. egg marking regulation to the whole of Canada, and
claims that this would only be enabling trade to follow its
natural channel. B.C. would export the surplus of high quality
eggs to the east and at the same time import the cheaper eggs
used by restaurants and confectionaries from Alberta, which is
also a large egg producing centre.

A difficulty the local egg producer must face is the
high cost of feed, caused largely by freight discrimination. It
is possible for the Japanese poultry farmer today to import his
feed from Canada more cheaply than the B.C. poultryman can get
it. Obviously there is no hope of remedying this difference
entirely. The railway must get the advantage of the long haul
and that can only be obtained by lower rates, but a slight re-
duction in the cost of grain would put the poultry farmer in a
much more advantageous position to compete with the rest of the
world.
Unfortunately there is no exportable surplus the year round. If there were, the seriousness of the situation would make some sort of co-operative marketing scheme imperative. The only movement in that direction, the B.C. Poultrymen's Co-operative Exchange, came to an untimely end in 1923, partly because of mismanagement, and partly as a result of the very unfavorable conditions then prevailing: A similar organization in the State of Washington succeeded in weathering the crisis, appointed a new management, and is now immensely successful. In B.C. today the situation looks like a vicious circle. There can be no co-operative marketing until egg production has increased sufficiently to provide a large exportable surplus which necessitates a selling organization. At the same time there will be no great expansion in production unless there is a fairly reliable means of marketing. B.C. has excellent storage facilities however, and there is a movement on foot to induce the farmers to store their own eggs which if kept off the market for a time would tend to prevent the usual slumps in February, March, and April. This by keeping prices more even throughout the year should increase returns and stimulate production.

Figures show that the export trade has fallen off considerably in the last two years as a result of the curtailment of production in 1923. In 1922 70 carloads were exported and about 30 imported; in 1923 only 20 carloads were exported and importation was largely checked by the amendment to the Egg Marks Act. In 1924 12 carloads were exported and about the
There is a growing desire to stimulate trade with Australia and New Zealand but at present it is impossible to fill all the orders that are received. Opportunities are continually lost because production is not great enough to maintain markets abroad.

The most important single factor, if there be one, in the success of those farmers who in spite of difficulties have prospered, is their own individual ability.

2. The Poultry Breeding Farms.

The first essential of poultry farming is high production per bird. Also it is advisable to have as high production as possible in the fall. It is then, while prices are high that the greatest profits are made.

In consequence of the desire to improve production, breeding, at first only a side line, has attained great importance among the poultry farmers of B.C. Some specialize entirely in breeding, but the majority of breeders also keep commercial flocks.

Success in this business has been largely built up on three foundations. First there are the official records of the Dominion Government, which has kept records of performance for poultry since 1919. "R.O.P." for poultry consists of the official inspection of trap-nested flocks of fine bred poultry on breeders own farms and the subsequent certification of the product recorded. The objects of Record of Performance are to
encourage the breeding of poultry combining high production and standard qualities and to secure for poultry breeders reliable information as to sources of such stock." B.C. farmers have taken advantage of the records of the Dominion Government, and B.C. shows the greatest increase of all the provinces, both in the number of breeders and the birds entered in the years 1921-22, and 1922-23. B.C. also leads in the percentage of birds entered which qualified for certificates, showing that B.C. breeders must have particularly good flocks. Registration by this means makes it possible to establish the good standards which are essential to high production.

The second factor is the action of the Dominion Government in establishing the Canadian National Egg Laying Contests through the Experimental Farms. These contests have three purposes. First, to stimulate interest in production; second, to provide a medium for R.O.P. registration; third, to secure data of an investigational nature. Canada was the first country in the world to provide for the registration of poultry in a national way, and she has done so by standardizing the Egg Laying Contests as a medium through which to obtain registration. In these contests B.C. made higher records than the rest of Canada, and as a result of this success a local organization was formed in 1922.

The third factor is this local organization, the R.O.P. Breeders' Association of B.C., which in spite of its youth and the difficulties which always come with the pioneer stage, has enjoyed a great measure of success. Its members are (1) Canadian R.O.P. for Pure Bred Poultry-Record year 1922-23, Report No. 4. P.5.
endeavoring to improve breeding methods by standardizing pedigrees and records. "Given the most advanced system of government inspection and certification of poultry records in the world, they have used this, together with their favorable climate and individual initiative to develop a poultry breeding centre which is unsurpassed on the American continent." The efforts of the local Association have been seen in a higher and more profitable production, and in propaganda work for R.O.P. members. The Association also acts as a channel for the selling of all surplus high grade stock. As the stock is improved the surplus increases and the object is now to build up an export trade. Prices are steadily rising with the quality of the product. Eggs fetch from $1.00 to $5.00 a piece, and individually pedigreed birds with high records from $10.00 to $100.00 each. There is a market in B.C. and on the prairies for pure bred stock, and New Brunswick and Nova Scotia are beginning to show demand for B.C. strains. As soon as production is great enough it is hoped to build up an export trade with England, New Zealand and Australia. In 1924 B.C. breeders sold to practically every State in the Union, Ohio being a particularly good market.

The Association is putting on a big advertising campaign, using all the farm journals, agents are being established on the prairies and abroad, and trade relations with

(2) There is fortunately a free exchange of pure-bred stock with the United States.
other countries are being rapidly built up through the consuls and trade commissioners. The field for expansion is practically unlimited. Canada leads the world in official records, and B.C. has the best records in Canada, and has sold stock to a large number of foreign countries although the local Association, formed in October 1922, only started selling in 1924. Up to the present no financial assistance has been received from the government. The Poultry Department of the University of B.C. takes a leading part in the improvements and the commissions and fees received by the University for the sale of stock through the office, to pay expenses. Still the expense that must be faced by the individual breeders is very great.

The R.O.P. Poultry Breeders' Association has had an almost phenomenal growth, and in spite of initial difficulties (1) the future looks bright for Poultry Breeders in B.C. Of the two branches of poultry farming it seems possible that the breeding and sale of pure-bred stock, at first a bye product of the egg producing industry, may become the more important of the two. B.C. breeders have the advantage of an early start, which is very important in any industry, and if satisfactory markets can be developed there seems no reason why B.C. should not lead the world as a producer of pure-bred poultry.

(1) It is worthy of note that very few R.O.P. members were forced out of business in 1923, while a large percentage of non-members were.
Chapter 4.

The dairy farms for which statistics are available are located in five districts. On the Arrow Lakes from East Robson to Nakusp the farms are mostly small. In the Courtenay district there are large specialized farms with soil in large part untilled. There are farms at Salmon Arm devoted to general dairy farming with some small fruits, and in the Chilliwack and Ladner districts the farms are large and highly specialized.

The degree of specialization which is most profitable varies with the ability of the individual farmer to manage his farm. Very great specialization seems justified in a case where there is high unit production or a special market, but in general specialization from 50% to 65% in dairying seems most profitable. This gives opportunity for an adequate study of the factors necessary to success along that line.

The sideline which the farmer adopts to supplement his dairy receipts vary. They include different kinds of livestock, fruit, and field crops, some of which are used as feed and some marketed. The type of sideline should be dependent on the operators' experience and adaptability; the relation of the farm to the market, and the demands of that market; the native of the farm soil; and the extent to which the sideline fits in with dairying: Hog raising, which is very popular on dairy farms elsewhere is not so common in B.C.,
largely because Vancouver provides an excellent market for whole milk, and also because the hog market is not well organized. There is opportunity for an increase along this line. It is advisable that the farmer produce a certain amount of his own feed. Pasture is good, but through an excellent feed, it does not always give the necessary feed per acre which is most economical on the high priced land.

As regards size, a farm of from 25 to 60 acres seems to have as great possibilities as any other, although here again the ability of the operator and his particular circumstances may result in greater profit from a larger or smaller farm. The average actual size is 100 acres, of which about 75 acres are tillable, and this is too large to be profitable managed by one man. Since the land is capitalized at a very high value it is necessary to make a greater return per acre, and therefore the holding of land which is actually not in full use is to be discouraged. On comparing land in Ontario and B.C. which is similar for farming purposes it is found that in Ontario the average capitalization is $195.00 per acre, while in B.C. it is $325.00. This makes it necessary for the B.C. farmer to invest $10.00 per acre more, and to obtain $75.00 gross returns, $25.00 more than his Ontario competitor. His only means of equalizing cost of production is through good crops and higher production per cow, which the climate makes possible. To this end both good breeding and good feeding are necessary, the farmer being of greater
importance than the latter. All these factors are dependent for success on the ability of the operator.

Figures for the last few years show that 1922 was the worst year in dairy farming and point to the fact that if the industry suffers from the variations of the business cycle, it is now on an up grade. Prospects look bright for the next few years. The dairy farmer ought to be able to make a living and save a little although he is not likely to make a fortune. The following figures show that he has by no means done so in the past.

Allowing for wages to the operator at $960.00 per year, he received interest on his investment at the following rates:

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919</td>
<td>8%</td>
</tr>
<tr>
<td>1920</td>
<td>4%</td>
</tr>
<tr>
<td>1921</td>
<td>1.3%</td>
</tr>
<tr>
<td>1922</td>
<td>.5%</td>
</tr>
<tr>
<td>1923</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

For the year 1922 the average net income received by the farmers was $1039.40 while in 1923 it rose to $1360.73. Labor incomes in 1921, when interest was charged at 9% on the capital investment, were all minus labor incomes except in the group of from 26-45 acres. When interest was charged at 3½% all made plus labor incomes. With interest at 7% the average annual labor income was $84.12 in 1922 and $174.25 in 1923, while with interest at 3½% it was $487.33 in 1922 and $767.49 in 1923.

With an interest charge of 7% it is obviously very difficult for the farmer to make a good labor income. 7% is what we would have to pay for a mortgage. On the other hand the
average farmer would probably be quite satisfied to put his surplus capital in the bank and receive interest at 3Vi% for it. He should not demand a greater return for it when invested in his own business, and at 3Vi% most of the farmers made a plus labor income however small.

If he receives no labor income what then does the farmer live on? In the first place, the interest on his capital investment which he is not compelled to pay to himself. Second the labor of his family which is seldom paid. Third, his own labor, and fourth the depreciation upon buildings and equipment. It should be remembered that net revenue—gross expenses deducted from gross receipts—is the important thing. The average farmer does not analyze the source of his income, and cares little whether he is living on his labor income or the interest on his investment.

The 37 acre farm, which is the one with the largest number of successes, has an average total capitalization of $13000.00 and a per acre capitalization of $325.00. Of this, land represents 54%, the dwelling 15%, farm buildings 12%, machinery 7% and livestock 12%. Returns average $2800.00 or $75.00 per acre. Expenses should be kept below $1200.00 or

(1) The value of the house is included in the farmers total investment, but house rent at 10% of its value is charged among farm perquisites which are credited to the farmer, so that his labor income does not suffer from a deduction for interest on house investment. The total average perquisites amounted to $450.00 in 1922 and $434.00 in 1923.
$32.00 per acre, as there must be a large return per acre at a low expense in order to make the use of the high valued land profitable.

It is possible to rent land in B.C. for 4.3% of its capitalized value. That is exclusive of taxes, which must be paid, however, whether the farm is owned or rented. Under these circumstances it is more profitable for the operator to rent a farm at 4.3% than it is to borrow the purchase price at 7%. His labor income would be considerably higher in the case of the rented farm especially as he has no capital in land and buildings. Under these circumstances one might expect to find more rented farms, but from the landlords' viewpoint renting is not so profitable as he receives a lower rate of interest on his investment than if he operates his farm himself. On the other hand by renting and working at some other occupation he may receive a much higher labor income. He must choose between a low wage or a low rate of interest on his capital. In the long run the attraction of being his own master, and the possibility that by careful management he may increase the labor income he receives from the farm, turn the scale in the favour of ownership. There are not many rented farms. The percentage in 1921 was 17.5%.

As far as markets are concerned the dairy farmers are fortunate in having in Vancouver a market which absorbs the greater part of their production. There is a surplus of milk, but the Fraser Valley Milk Producers' Association has
undertaken to dispose of it. As far as butter and cheese are concerned there is practically no export trade. On the other hand B.C. imports huge quantities of butter.

**BUTTER IMPORTED.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>4 million lbs.</td>
</tr>
<tr>
<td>1921</td>
<td>7 &quot; &quot;</td>
</tr>
<tr>
<td>1922</td>
<td>8 &quot; &quot;</td>
</tr>
<tr>
<td>1923</td>
<td>9 &quot; &quot;</td>
</tr>
</tbody>
</table>

The milk surplus varies greatly. It is largest in May and June, smallest in February. From the viewpoint of the individual farmer, the important factor is the increase in the production of butterfat per cow. In 1915 B.C. produced 2½ million lbs of butterfat, and this has increased to 6½ million lbs in 1924.

Since B.C. producers do not export dairy extent, they do not come into direct competition with producers in other localities, nevertheless world prices govern local prices. If the price charged by the B.C. producer were too high the home market would be invaded by foreign products. Therefore the B.C. producer is in competition with the Ontario and United States producer.

There are three Co-operative Associations among the dairymen in B.C. The Comox Creamery Association for Vancouver Island, and the Vancouver Island Milk Producers' Association in Victoria merely assemble the product. They simply provide a central wholesale station to which the milk is shipped and from which it passes to the various retailers.

The Fraser Valley Milk Producers' Association on the mainland,
both assembles and distributes. This organization has hitherto been very successful, and the city of Vancouver has reaped the benefit by enjoying lower milk prices than any other city in the Dominion except Ottawa, with which there is continual rivalry for lowest price.

The milk producers claim that it is impossible for this organization to exploit the public so long as it does not attempt to control production. If prices were raised as a result of a monopoly the returns would go direct to the farmer and would result in increased production which would flood the market and automatically reduce the price. As a matter of fact the Association has not a monopoly as there are a large number of independents. The citizens of Vancouver have nothing to fear from the Association thus far; on the contrary it sends to improve the quality of the milk. It confers an enormous benefit on all the independents as well as its own members by disposing of the surplus of milk through creameries, and thus preventing waste and a glutted market during the months of high production. Actually the members get 5¢ per lb less for their butterfat than do the independents, who reap the advantages of a stable market without assuming any of its obligations. The Association is carrying on an extensive campaign to educate the independents and thus eliminate them. The farmers realize that without Co-operation all would be receiving lower prices; they have great confidence in their organization, and they are trying to show the independents that the interests of all lie
in the same direction, that of co-operation. The future of the dairy industry depends largely upon the type and inclusiveness of the co-operative organization which is developed. The farmer's first problem is that of production, but close upon its heels comes that of marketing, and co-operative marketing is essential to the success of the dairy industry.

Owing to the fact that B.C. has so little export trade, the high United States tariff has little effect. Also our own lower tariff is augmented by unwritten agreements between the local co-operative and those south of the line; to the effect that we will keep out of their market if they will keep out of ours. This agreement has proved effective during slight overproduction in the State of Washington, but if their exportable surplus became too great their co-operatives could not hope to prevent the invasion of the B.C. market. These agreements point to an important development, that of co-operation between co-operative societies, a development which will become all the more imperative as local organizations gain in strength.

The dairy farmers of B.C. have a great difficulty to surmount in the high capitalization of land, which puts them at a disadvantage as regards cost of production when competing with farmers who do not have such a large amount of their capital invested in land. As already stated this makes necessary a greater intensity of cultivation. But B.C. farmers have one inestimable advantage which makes it possible for them to
equalize; namely, their climate: The mild and favorable climate of the Pacific slope leads to high production per cow, which is the important factor. Also crops are very good. The comparative crop yields in oats and hay are practically double those of Ontario and the prairie provinces. This permits the dairyman to increase his returns per acre.

After considering the two factors of land and climate the dairyman's success or failure is largely in his own hands. That it was possible to make profits even during the bad year of 1922 is shown by the fact that some farms showed a substantial operators' income even after paying interest at 7% on the investment. Most of the farmers today are leaving their capital in their farms, even when they could realize it and move out, which shows that they have substantial hopes. The average capitalization today is from $2000.00 to $5000.00 per farm, therefore the dairy farmer cannot afford to pay as high a rate of interest as can the poultry men on a smaller investment. Nevertheless he may make a good living and save at least a little. His greatest need is for more education both along technical and business lines. A lower cost of production of butter fat is essential to the development of the industry in B.C. in order that the farmer may take advantage of the worldwide market for butter fat and increase his business accordingly. And in order to reduce his cost of production, he must have the requisite technical knowledge, and also learn how to organize his farm in the way that it will pay best.
Chapter 5.

1. Cattle. There are no figures available showing the success or failure of the cattle industry, and it is not probable that there will be any in the near future. A survey was considered by the Extension Department of the Faculty of Agriculture in the University, but the requisite information was not forthcoming from the individual farmers. They are men operating on a large scale, and they resent inquiries more than do the small farmers. Also many of them do not know themselves exactly how they stand. The cattle for instance are counted but once a year; the rest of the time they are out on the range, and it is frequently difficult to calculate the exact amount of stock. However it is possible to estimate roughly the position of the cattle industry, and to discover what are the chief factors affecting it.

Cattle farming in B.C. is confined to the range districts of the Cariboo, the Chilcotin Valley and the Nicola Valley. The men engaged in it are of a different type to those in other kinds of agriculture. To begin with, even if the farm is a comparatively small one, an enormous capital investment is needed. Therefore the men who enter it are on the whole far more business like than the average small farmer. Their investment must be managed carefully, and the men are as a rule of a fairly progressive type.

Since 1920 the cattle farmers have been losing
money, or at best only just managing to make their expenses. Prices have been very low, but they are gradually improving. The beef now produced on the American continent is not sufficient to feed the population. Prices fell so low after 1920 that many cattlemen were forced out of business, therefore although the per capita consumption of beef on this continent has decreased, the demand is still greater than the supply, and this tends to raise the price although the importation of beef from the Argentine has hitherto succeeded in keeping it down. B.C. cattlemen have shared in a depression felt all over the continent. Their cost of production has not differed materially over the last five years.

There are three important things needed by the farms: first good breeding, second accessibility of range, and third good management. The necessity of good breeding has been largely recognized and the scrub bull almost entirely eliminated. One drawback is the fact that packer does not pay a sufficiently high premium on excellent cattle. There is not a large enough difference between cattle grading choice, and those merely ordinary. Hence the incentive to high finish both from a breeding and feeding standpoint is absent. The second factor, accessibility of range, the B.C. cattlemen have. The third, good management, depends entirely upon the operator. It was found possible by clever and economical management on a few farms, to make money even when the others in the industry were losing it. On the whole the cattle farmer is less to be blamed
for poor management than other agriculturalists, if only for the sake of his larger investment.

There is not much winter feeding in B.C. Most of the farmers place all their stock on the market in the fall. If they could feed some of their cattle through the winter and put them on the market in the spring when prices are much higher it would be greatly to their advantage, but this involves much capital which is not always forthcoming. Those farmers who do practise winter feeding buy their stock in Alberta and fatten them through the winter on alfalfa which gives a slower and cheaper but not so high a finish. The Lillooet, Kamloops and Okanagan districts grow alfalfa, largely as a cash crop, so that it can be obtained fairly easily. The Western Pacific Slope will never become a great grain finishing centre as it cannot hope to compete with the prairies, but alfalfa feeding would certainly be profitable for many B.C. farmers could they afford it.

The great need of the cattlemen is an organized central market. At present most of the stock is bought in Alberta, where there are large stockyards and plenty of opportunities for choice, and is brought in here to be finished. The cattle are sold directly to buyers of big companies such as Swift and Burns, who come to the farms and buy the annuals there. The farmer is thus saved the troubles of grading and shipping, but he has to take the price offered to him. The B.C. Stockbreeder's Association has been agitating for the
establishment of a government stockyard in this province, but at present the supply of cattle is not great enough to warrant it, and until there is a central market the supply is not likely to increase to any appreciable extent. Another difficulty in the way of a central market is the opposition of big concerns such as Swift and Burns. At present they have practically no competition and they are not likely to want any market which would compel them to bid against others for their beef.

The cattle industry throughout Canada is suffering from the prohibitory tariff of the United States. The States are the natural market for the prairie provinces, and the blocking of that market has resulted in a considerable fall in prices. This reacts on B.C. which has no exportable surplus and is therefore not directly affected by the tariff. Some store cattle are being shipped to England now, and there is a possibility that with the reduction of ocean rates on livestock a trade in beef cattle may be built up with the Orient. But this is a mere possibility and at present low prices prevail throughout Canada as a result of the high United States tariff.

B.C. cattlemen are in a more advantageous position than those on the prairies. Owing to the fact that B.C. does not produce enough beef for home consumption, some must be imported and that pays freight rates which the home product escapes. The prices that are received for beef in B.C. are
from 1½ to 2½ lb more than in Calgary. However the prairies have the advantage of large scale production. Prices in B.C. have gradually improved since 1921 and 1922. They are now 6.75 per 100 lbs. and were from 1½ to 1¾ lb less in 1924.

Were it not for the prohibitory American tariff the future would seem bright for B.C. cattle farmers, but if that remains in force it will necessitate finding other markets, which will take some time. There is little the cattlemen can do except to manage their farms as economically as possible and wait for prices to improve. The lack of marketing facilities cannot be overcome until production is increased, and that will not be at present prices. As usual it is the small man operating near the margin without any extra capital who suffers most, but he cannot improve his position till prices are better, not only throughout B.C. but throughout the whole of Canada.

2. Sheep. There are certain districts in B.C. that are not adapted to cattle but are well suited to sheep. Sheep are at present paying very well, either as individual flocks, or as a sideline upon the range or on general farms. Both wool and mutton are fetching a very high price today, higher throughout Canada than in any other meat producing country in the world.

The reason for high prices lies in world conditions. Prices fell in 1920 and 1921 because of the large supplies of wool left after the war. During the depression many sheep farmers were forced out of business, and they flooded the market with breeding stock. By now the wool has been used up and since the
supply is checked prices are likely to remain high for some time.

Sheep farming in Canada has never been as popular as might have been expected. The small supply of wool produced has been sold hitherto on an unorganized market which made competition with big wool countries such as Australia difficult. Now however Canada's wool is put on the market on a graded basis which gives a chance for fair competition. It seems likely that there will be a large increase in the number of sheep kept in Canada and also in B. C. where facilities are admirable in certain districts.

Used as a sideline sheep may help to steady production in other lines and thus aid in the development of agriculture as a whole.
Chapter 6.

It has been found impossible to obtain figures for the Small Fruit Industry for the last three years. The results of a Small Fruit Survey were published in 1921, but since then although data has been collected from the farmers it has not been assembled. In consequence all statements made here must be of a very general and often tentative nature. It is possible however to point with a fair degree of accuracy to general development and tendencies for the years 1922, 1923 and 1924, and that is what has been attempted.

The districts devoted to small fruit farming are chiefly on the Coast where the climate is most suitable. In future the production of strawberries will be largely confined to Vancouver Island, while the Fraser Valley district appears ideal for raspberries. There are certain other localities in the Interior which grow small fruits: Salmon Arm, Kootenay and Boundary, North Okanagan and Terrace, and Creston. The last named is the only one of great importance, and has one great advantage over the coast districts, in that it is much nearer to the prairie markets.

Before the war the B.C. small fruits industry was small, selling prices low, and few acres devoted to production. During the war prices rose and the industry began to expand, then being an enormous increase both in acreage and number of growers between 1916, the first year for which figures are obtainable,
and 1921. Prices in 1919 and 1920 were exceptionally high, almost ridiculously so in some cases, and as a result there was an enormous increase in production stimulated by the high returns the growers were receiving. Farmers already in the business increased the number of acres under cultivation, and new men began to flock into the industry. The acreage increased enormously: In 1920 there were 500 acres on Vancouver Island and 3000 in B. C. as a whole and this increased to 1600 acres on the Island and 6000 in B. C. in 1924. The value of the output increased from $989,672.00 in 1920 to $1185,442.00 in 1921 and this, taking into account the decreased prices, shows an enormous increase in production. The number of growers increased during 1920-21, but decreased later when the period of depression came. Then a large number went out of business and others curtailed their production. The industry seems now well on the way to recovery, the figures from 1920-1924 showing a substantial increase in acreage. The average percentage of increase is 136.2%. This in detail is as follows:

**PERCENTAGE OF INCREASE IN ACREAGE 1920 - 1924.**

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberries</td>
<td>41.6%</td>
</tr>
<tr>
<td>Raspberries</td>
<td>146.7%</td>
</tr>
<tr>
<td>Loganberries</td>
<td>265.5%</td>
</tr>
<tr>
<td>Blackberries</td>
<td>19.5%</td>
</tr>
<tr>
<td>Red Currants</td>
<td>152.0%</td>
</tr>
<tr>
<td>Black Currants</td>
<td>200.0%</td>
</tr>
<tr>
<td>Gooseberries</td>
<td>74.5%</td>
</tr>
<tr>
<td>Rhubarb</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

There are fewer growers in 1924 than in 1920 showing that specialization is greater than it was then. This is a profitable progress as specialization leads to the employment of better
methods and more intensive cultivation.

There are no figures available as to the exact net incomes and labor incomes received by the farmers for the last three years but it is certain that they were often a negligible quantity if not a direct loss. The reasons for this failure are many:

1. General agricultural and business depression.
2. Local overproduction.
3. Type of farmer.
4. High capitalization of land.
5. Lack of an organized market.

1. General agricultural and business depression.

The general inflation of prices which followed the world war led to a period of great business depression about 1922. Abnormal conditions intensified both the boom period and the following depression. The condition of agriculture throughout the world was deplorable and B.C. farmers were not by any means alone in their difficulties, a great part of which may be attributed to the world wide depression, and the effect which it had on fruit prices.

2. Local overproduction.

As the result of inflation caused largely by the war, the prices received for small fruits were ridiculously high in 1920 and 1921. Growers obtained as much as 19¢ per lb. for jam berries. This state of affairs was co-existent with the return of a large number of men from Europe, in many cases dissatisfied with their routine and in search of some new form of occupation.
and investment. The "back to the land" movement fostered by
the Soldiers' Settlement Board led a number of returned soldiers
to invest in land. At the same time many speculating business
men were attracted by the high prices received by the fruit
growers. Small fruit farms are desirable for several reasons.
The initial investment needed is comparatively small and yields
quick returns. The acreage required is not large and there is
no excessive charge for labor, also small fruits are frequently
planted on newly cleared land thus cutting down the expense of
land improvement. All things considered, small fruit farming
with inflated prices seemed a very profitable occupation. A
large number of men bought land at prices raised by the after
war demand for it. Some of this land was not suited to the
production of small fruits, and a large proportion of the new
farmers knew nothing whatever about fruit production. However
the total production of 1921 was greater than that of former
years, and that of 1922 exceptionally so. The market remained
about the same and there were no additional facilities for ex-
porting the enormous surplus over former years. Then more was
produced than could be marketed which resulted in a ruinous fall
in prices. The jam factories overstocked, and being unable to
sell a large part of their output stored it until 1923 and re-
fused to take any more fruit. 1923 found conditions very little
better, but these two years eliminated a large number of the
marginal farmers and production was curtailed. The result has
been a far better market for 1924, and improved prospects for
the future.

There is a danger of overproduction in B.C. whenever prospects become too bright. Small fruits yield a return very soon after they are planted, consequently it is easy to invest capital in their production when prices seem to warrant it. Since the fruits are perishable they must be sold fairly soon after picking which limits the market considerably. In order to avoid overproduction it is necessary to keep open all possible prairie markets, and in years of particularly heavy production to take care of the surplus through canneries and jam factories. Unfortunately the demand for small fruits on the prairie is largely controlled by the success or failure of the wheat crop. Farmers cannot buy without purchasing power, hence a poor harvest on the prairies rapidly reacts on the B.C. small fruit farmer.

3. The type of farmer.

As a result of the after war boom and high prices, small fruit farming attracted a large number of people who had no permanent interest in it and no particular qualifications. The business man who took it up as a speculative sideline had none of the requisite technical knowledge. In consequence his cost of production was very much higher than it need have been, and the reputation of the industry suffered accordingly. The same thing is true of a large number of returned soldiers and immigrants who settled on the land. Many of them were not of a type suited to farming, and a large number of those both eager
and willing to learn had to gain their knowledge through better experience. Farming is a specialized occupation and requires a specialized knowledge, and that necessity has been overlooked in the past. If the farmer is to make any profits he must cut down his cost of production, and this many of the new men did not know how to do. They bought expensive land and did not cultivate it with sufficient intensity.

The boom years of 1920 and 1921 did do one service in introducing some business methods, and the bad year of 1922 and 1923 eliminated most of the unfit. The farmer on the margin, the speculator, and the incompetent were forced out of business. Those who remain are the more efficient farmers who are studying the best methods of production. They have learned their lesson in part, but there is still room for improvement in the way their farms are managed, both from the technical and business standpoints.

4. The High Capitalization of Land.

As a result of the enormous demand for land after the war its value was very much inflated. Many farmers paid twice what the land was worth and are still hindered by the necessity of paying interest on the money which they borrowed as purchase price. Land values have fallen considerably and would have fallen still further were it not for the fact that the farmer is unwilling to admit his loss and continues to quote his land at somewhere near the price he paid for it. Many men paid $1000 per acre for land on Vancouver Island which is not worth
nearly that today. This gives the farmer a heavy initial handicap in the form of interest payments, and makes it necessary to cultivate each acre of land very intensively. Some idea of the handicap which this puts upon the farmer maybe gained by considering 1924 conditions. Exact figures are not yet available but it is estimated that without allowing for the payment of interest most of the farmers gained a fair living wage, while when interest payments are allowed for, the majority show minus labor incomes.

There is an advantage which may possibly result from the high value of land. It necessitates more intensive cultivation, otherwise the farmer cannot make any labor income, and this intensive cultivation leads to greater specialization and a study of conditions which is badly needed. Many farmers bought land suitable for small fruits, at ruinous prices, and then proceeded to devote part of it to more extensive cultivation in the form of dairying. This, of course, proved very unprofitable and they are realizing their mistake. A small fruit farmer should specialize and cultivate his land intensively, and there is an increasing tendency in this direction simply because it does not pay to do otherwise with such high priced land.

5. The Lack of an Organized Market.

B.C. small fruit farmers have had to fight against a disorganized market, and these efforts have resulted in too many attempts at reorganizing. There has been a new manager
practically every year in the co-operative societies and that their product lead to efficiency. Owing to the fact that their product is perishable and must be soon marketed, attempts have been made to stabilize the price by means of Co-operative Societies, and there have been too many societies. The Mainland Growers are members of the Berry Growers' Co-operative Union of B. C., which at present bids fair to become a strong and successful organization. It has had to face great difficulties in the past but seems to be surmounting most of them. On Vancouver Island there is another association which hitherto has refused to join that on the Mainland because its overhead charges are much less, and there members are not anxious to increase them by taking over part of the burden of the Mainland producers who are suffering under a heavy overhead as a result of too rapid an expansion. There is just a possibility that the two organizations may combine after the revelations of the Duncan Report, in which case they will be able to control a much larger proportion of the supply.

There are still a large number of independents who refuse to join the co-operatives, and they are reaping the benefit of the efforts of the latter to keep up prices without assuming their share of the obligations. A great disadvantage that the co-operatives labor under is their inability to obtain money except on very short time loans. This contributes to their enormous overhead which the independents are unwilling to share. However, since the Vancouver Island Co-operative Association gave its
members better prices in 1924 than the independents were able to obtain, it is probable that membership will be materially increased.

Even if one central organization can be established to control all the small fruits in B.C. marketing difficulties are by no means over. Because the United States season is earlier than ours, it is possible for American fruit to be put on B.C. markets from two to three weeks before local fruit is ready. The United States producers secure the highest prices and the local market is spoiled for home producers. There is a law against dumping but it does not appear to be adequately enforced and B.C. farmers are agitating for an increased tariff. Failing this the best thing they can hope for is an agreement between the American and local co-operatives not to spoil one another's markets. This would not be very effective at present as the independents still produce in large quantities on both sides of the line. B.C. producers must endeavor to maintain the prairie markets and to do so must have control of as large a part of the supply as possible.

There is one way of relieving an overstocked market and also of doing away with many of the evils of overproduction, this is by the establishment of canneries and jam factories. The former will dispose of a large surplus of high class fruit, while the latter will take care of fruit that is overripe and slightly spoiled and thus prevent it being a dead loss. Up to the present this sideline has not been exploited in B.C., which has hitherto
been devoted entirely to production for the fresh fruit market. The Barry Growers' Co-operative has established a cannery at Mission and is considering the purchase of a jam factory. This is undoubtedly a move in the right direction and quite apart from the steadying effect it will have on the market, should prove a profitable business venture. But here again the Co-operative is being hampered by the necessity of raising money on short time loans. The money borrowed to pay for the cannery was on a year loan, therefore the overhead for the first year was extremely heavy and no profit could be expected.

The B.C. small fruit industry is as yet very new; there are few subsidiary industries and any steps it takes are necessarily of an experimental nature. There are bound to be many mistakes made, but the difficulties which are the result of mismanagement will be done away with as experience increases.

6. Exploitation by Brokers and Jobbers.

It is hard, especially at this early stage of the investigation, to estimate just how much of the failure of the fruit farmers can be attributed to their exploitation by brokers and jobbers as exposed in the Duncan Report. However it is safe to say that bad conditions were certainly made worse. The grower in many cases actually did not receive the sum to which he was entitled for his fruit. Also the alleged black combine appears to have added to the strife and mismanagement which are common enough in all co-operative societies, and prevented any one organization from securing the support of all the growers. If this
exploitation and interference can be eliminated the fruit farmers will have a much better chance of success.
Chapter 7.

Tree Fruit growing is carried on in many places in the interior of B.C. but the three most important centres, those considered in the University Extension Surveys, are the Okanagan, Salmon Arm, and Keremeos districts.

Actual figures are available only up to 1923, the latest survey considering and comparing the three years 1921, 1922, and 1923. During those years the growers suffered heavily from a great fall in prices while there was no corresponding decrease in cost of production. Prices were exceedingly high in 1919 and 1920 and the drop came suddenly giving little chance for readjustment to meet the new situation. 1922 was the worst year and since then conditions have been gradually improving.

The average price per box of marketable fruit received by the growers after all outside charges were paid was 75¢ in 1921, 27.5¢ in 1922 and 38.8¢ in 1923. The following table shows average returns per box received by the growers when interest and wages were calculated together with other expenses of production.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Profit or Loss</th>
<th>Profit or Loss</th>
<th>Profit or Loss</th>
<th>Profit or Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>+.937</td>
<td>+.60</td>
<td>+.425</td>
<td>-.09</td>
</tr>
<tr>
<td>1921</td>
<td>+.27</td>
<td>+.01</td>
<td>-.13</td>
<td>-.39</td>
</tr>
<tr>
<td>1922</td>
<td>-.162</td>
<td>+.405</td>
<td>-.526</td>
<td>-.843</td>
</tr>
<tr>
<td>1923 (Estimate)</td>
<td>+.05</td>
<td>-.24</td>
<td>-.35</td>
<td>-.64</td>
</tr>
<tr>
<td>Average 10 yrs.</td>
<td>-.015</td>
<td>-.279</td>
<td>-.328</td>
<td>-.522</td>
</tr>
</tbody>
</table>
In this table interest is allowed at 7% and wages to the operator at $960 per year. Family labor is allowed for whether paid or not and the owner is charged 10% of the value (1) of his house as rental. It shows that not allowing either wages or interest the average farmer received a minus income in 1922, and a negligible one in 1923, while if both wages and interest are charged there was a plus income in no year since 1920. It must be remembered however that conditions during these years were not normal. After war prosperity lasting until 1920 raised fruit lands to high prices and attracted settlers, and many farms changed hands. Then abruptly came low prices and a dis-organized market, which played havoc with the hopes of the growers.

Land values were very high in 1921 as a result of an accelerated demand and they remained fairly high throughout 1922 to 1923 when there was a slight reduction. In 1921 orchard lands averaged $982.67 per acre, $961.57 in 1922, and $886.50 in 1923. Since then there has been a substantial drop in values due in part to the fall in prices and subsequent reduction in the earning power of the land, and to the low valuation placed on recently purchased farms. In 1921 orchardists in general based

(1) Interest on the house if charged at 7%, depreciation and repairs average 5%, therefore 10% of the value of the house is charged to the farmer as expenses. This is credited to the farm among perquisites so that it does not affect the farmer's labour income.
the value of their land on what similar land was selling for in their neighborhood, or on what they had actually been offered for their own farms, methods which leave room for great inaccuracies. The ideal test of a farm's value would be its prospective earning power over a long period of time and that is neither salesmen nor purchasers considered. The value of orchard lands is still fairly high in 1925 but that can be explained, in part at least, by the following factors:

1. **The productive value of the land during good years.** It is anticipated that better conditions will prevail and the value of the land is thus based in part upon an estimate of its future earning power.

2. **The advantages both climatic and social of the interior districts where most of the orchard land is located.**

3. **The outlay required in improving new land.**

An unfortunate consequence of the high value of land is that only those men with plenty of capital can safely enter the fruit business as long as the overhead charges are so heavy. Those who bought during inflated prices are still paying interest on their heavy investment, which adds to their other difficulties. Those who paid for the land and equipment cash down have not felt the strain as heavily as the others since they are not compelled to pay interest to themselves during bad years although it is a legitimate charge.

Taxes and water rates which represent 10% of the grower's expenses have shown no reduction as prices fell.
Water rates are very heavy in the irrigated districts. In some cases the total receipts for fruit in 1922 were not sufficient to pay for taxes and water rates.

The 1922 depression led to a considerable curtailment in the credit extended to the grower. Banks grew wary, and it was almost impossible to obtain any further capital. One result of this was that orchards were neglected for want of working capital and the production per acre was not increased. Farms will feel in the future the injurious effects of these bad years when it was difficult to give trees and soil the attention they needed.

The investment once made, an established orchard farm does not readily lend itself to sudden change. This is true to a degree of all farms, but especially so of tree fruit. On poultry or dairy farms the stock can be moved and their value realized. Fruit trees cannot be removed nor can they be increased or decreased easily. The only way to decrease the supply is to pull out the fruit trees, and to increase it, young and nonproductive trees must be planted, the farmer depending on future crops and on the increased value of the land for recompense. Once planted, then, fruit trees cannot be considered apart from the land as can stock. For this reason the number of acres in orchard land remains fairly constant and has increased only very slightly in the past four years. From 1921 to 1923 there was very little new planting.
The average size of the farm is 22.8 acres. The bulk of the capital invested, 77%, is in land, and of that land 95% is in orchards the remaining 5% being more or less unproductive. The average dwelling represents 13%, buildings 3.5%, equipment 5%, and stock 1.5%. This shows that the fruit farm is very highly specialized. The average orchardist invests $2500 in his house showing that he intends the farm to be his home. He might profitably increase his expenditure for stock such as poultry or bees, which do not require a large amount of land.

Apart from interest payments the greatest total expense was that of Labour. The following table gives a comparison of expenses.

<table>
<thead>
<tr>
<th>PERCENTAGE OF TOTAL EXPENSES.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Labor (not including owner's)</td>
</tr>
<tr>
<td>Feed, Seed, Fertilizer, Spray</td>
</tr>
<tr>
<td>Material, Repairs</td>
</tr>
<tr>
<td>Taxes and Water Rates</td>
</tr>
<tr>
<td>Depreciation on buildings and machinery</td>
</tr>
<tr>
<td>Interest on capital invested</td>
</tr>
</tbody>
</table>

Hired labor decreased greatly after 1921 showing that the farmers were cutting down expenses and substituting their own and their families' labor for that usually hired. A specialized fruit farm does not offer steady employment for labor through the year, and this brings up the question of side labor. (1) Family labor is charged as an expense though it is seldom actually paid.
lines which could be profitably carried on with the fruit farm, and would allow of a more economical employment of labor. Many growers waste labor because they do not keep sufficient working stock or machinery, and are compelled to do much mechanical work themselves. This may be the result of poor management or it may be due to an actual lack of working capital. The average farmer is very careless about his tools and machinery and frequently does not take depreciation into account at all. It takes $152.78 per year on the average farm to pay for depreciation of working equipment.

In reducing cost of production the most important factor is increasing the yield per acre. In 1921 the average yield was 242 packed boxes per acre and this rose to 263 in 1922 and 270 in 1923, showing a distinct improvement. As yet, however the yield does not come up to that of the specialized fruit farms in the State of Washington. Cost of production varies greatly. One farm showed a cost of 17¢ per box while another was as high as $1.34 per box. During 1922 and 1923 not even the high producing farms made any revenue but this was due to lack of an orderly market and a good system of distribution, and not to overproduction or poor quality fruit. B.C. fruit farmers are specialized and therefore the fruit can show uniformity of pack and conform to definite standards of grade and colour, all of which go to make it easily marketable.

Variety is a very important question to the grower.
There are certain varieties which are suited to particular districts, and these can only be discovered by experiment. Also there are certain varieties which are on the market early and others which keep throughout the winter. B.C. has 65% of its apples in early varieties which must be handled quickly or put into cold storage, whereas only 30% of the Washington and Oregon apples are early varieties. We need more late apples in B.C. to balance the consuming period and avoid overstocking at one time and a lack of supply later in the winter.

The great need of the Tree Fruit growers is a stable organized market, and the only practical way to obtain this is by co-operation. The history of the efforts made in that direction is not encouraging up to 1924. The first attempt to control the B.C. supply came from the Okanagan United Growers formed in 1913. This association became bankrupt in 1922 partly because of the very poor conditions in the fruit business after the war and partly because of local mismanagement. This fiasco helped to make the condition of the individual grower still worse, and tended to discredit co-operation. However the extremity was great; and individual marketing resulted in a ruinous chaos, markets being glutted in some places while there was a demand in others. After the visit of Mr. Sapiro the B.C. Fruit Grower's Association was formed, and in spite of initial difficulties it has prospered and the members are already receiving much better returns than formerly. It controls about
95% of the supply of marketable tree fruits in B.C., and is endeavoring to build up safe and substantial markets.

There are two big disadvantages that the B.C. Grower must face. One is the fact that his best and nearest market is the prairie provinces, and that he is therefore unavoidably injured by a failure in the prairie crop which deprives the prairie farmer of purchasing power. This can only be avoided by developing other markets. The second is American competition. The season of the American states to the south is from ten days to two weeks ahead of that in B.C. Therefore American fruit comes on the market before B.C. fruit is available. The fruit growers are anxious for Protection to prevent this. They desire a law which will prevent American apples coming into B.C. and also on to the prairie market, before B.C. fruit is ready.

There are two problems which face the fruit grower today. The first is that of reducing his cost of production and is entirely an individual matter. It depends on the ability and management of the grower, to plant suitable varieties, to increase his yield per acre, and to manage his farm economically. The second problem is that of marketing which is a more serious matter to the farmer than it is to the industrialist. Fruit must be sold or it perishes; production cannot be curtailed if prices are not adequate. The only solution of this problem appears at present to lie in co-operative marketing, and on the success of the B.C. Fruit Grower's Association hangs the prosperity of the tree fruit farmers of the Province.
Co-operation is known as the "Golden Rule in Agriculture", but it has taken more than fifty years for that rule to gain recognition in agriculture throughout the world. The first "productive" co-operative society was founded in Germany in 1871, and today in 1925 there are many districts where the principle has only a tentative hold, where it is merely spoken of as desirable or put into practice by way of experiment.

Co-operative Societies may be divided into two main classes: Associations of Producers and Associations of Consumers. It is the former in which the farmers are largely interested and which will be dealt with here. A Producers Association may be either a co-operative selling organization or it may also undertake production in the usual sense of the word. A co-operative dairy takes the milk and changes a large pail of it into butter and cheese before selling it. A co-operative fruit cannery changes the form of the fruit. As a rule, however, the co-operative society has for its main object the marketing of the product. Dairies and canneries are merely side lines which are started as a rule to dispose of an un-marketable surplus.

There are only two ways in which co-operation may develop as a result of necessity, or of education along co-operative lines. The difficulties which the Agricultural and
Industrial Revolutions created for the farmer, and the general depression from which agriculture has been suffering have made the former reason, the most important. Because farmers produce individually they are not prepared for group selling, which comes as the natural result of group production in the industrial field. The farmer in the past has not been a business man, his role was to produce, to sell his product for what he could get and then return home to produce more. As a result we have had overproduction in some districts, and iniquitous shortages in others, all because the farmer's business was merely to produce and not in any sense to organize either his production or the distribution of his product. This state of affairs injured the farmer, injured the consumer and injured the country as a whole. The only remedy is to instil some business methods into the the farmers collectively and individually. "The farmer is the only producer who produces without informing himself carefully as to future demand; who sells at the price the buyer is willing to pay; who does not condition his products carefully for market; who dumps them in large quantities on the market soon after harvest; and who therefore pays high charges of all sorts to other people to do what he ought to do himself." The aim of co-operation is to correct all this by introducing a system which prevents waste and speculation, and insures that the man who produced farm products shall have a chance to merchandize them and to make a living out of it.

(1) Honorable Henry C. Wallace. Address at Columbia, Ohio., 1922.
Co-operation must always be in part the result of experiment, as the conditions which govern its establishment differ with different localities. The general characteristics which have been found necessary to success in the past are as follows:

1. The primary purpose is marketing on a commodity basis.

2. The commodity must be marketed as a whole and not by locality. Experience has shown that locality marketing leads to strife among the farmers and makes it more difficult to grade and standardize the product.

3. The co-operative association must be based on legal binding contracts with the farmers, otherwise agreements are apt to be broken in times of difficulty and the association falls to pieces.

4. Products must be pooled according to grade and size etc. This leads to insistence on quality and eliminates jealousy and friction between members.

5. Grades and standards of quality for products must be provided. This makes possible more extensive advertising. Canadian stockbreeders and poultrymen are very lucky in this respect, as the Dominion Government maintains a rigorous system of grading by which all farmers are invited to profit, and which gives co-operative associations a recognized high standard to establish.

6. The co-operative should be managed by an expert who specialises in marketing that particular product. This gives the
individual farmer the advantage of specialized business skill and information in selling such as it would be next to impossible for him to acquire himself.

7. The co-operatives should operate on a non-profit basis, merely handling the products and paying the farmer the sale price less the cost of operation. Thus by eliminating middlemen the farmer gets a much larger proportion of the consumer's dollar than ever before.

8. The association should be operated as a semi-public body, its records should be open to the public, and farmers kept advised of its activities and given frequent financial statements.

Co-operative marketing endeavors to maintain a stable market and does this by substituting merchandizing for the dumping practised by individual farmers. When the farmer sold his crop he usually put it all on the nearest market immediately after harvesting. If better markets and prices existed elsewhere he did not know it. Under co-operation it is the business of a specialized manager to keep in touch with markets throughout the world. If the product is non-perishable it is stored and released as demanded, a process involving a good deal of capital. If the product is highly perishable it is shipped over different routes to different markets to avoid glutting. In the merchandizing of some perishable products storage and routing are both used to insure a stable market. The advantages of merchandizing in place of dumping are.
1. It organizes the market.

2. It reduces the cost of marketing. All is done through one central agency, instead of many.

3. It broadens the market through advertising, frequently by the use of a trade mark. The experience of the Sun Maid Raisin Growers is an excellent example of what may be done to create a market.

4. It improves the quality of the product. The salesman will refuse to accept anything not up to standard.

One great requisite for success is control of the largest part of the supply. The prosperity of co-operative marketing depends largely on this. One of the reasons for the failure of the O.W.U.G. was its inability to eliminate the independents. The larger the Association, the greater the number of growers among whom to divide the overhead. A struggle with the independents and with the speculative selling interests is inevitable in the outset, and any organization must be prepared to face it.

From the consumers point of view it is often claimed that the co-operatives are dangerous, at least potentially so. In so far as they make for a more stable market and a more stable price level, they are doing a service to the whole community. It is undoubtedly true that when the market is flooded through unorganized selling, the consumer reaps the benefit in low prices, but he has to pay high prices later in the season because of the shortage of product. A more stable price
level would benefit rather than injure him. Statements are frequently published showing the difference between the price received by the farmer and that paid by the consumer. This difference is largely eliminated by co-operation. The farmer receives what the consumer pays less selling expenses. Before the establishment of the Fraser Valley Milk Producers' Association the dairy farmers of the Fraser Valley received only about 40\% of the consumer's dollar; they now receive 65\%. The farmer is anxious to obtain the profits which have hitherto gone to the middleman. This will increase his returns without injuring the consumer. Assuming that prices must be raised to give the farmer a return for his labour, surely this is more desirable than the continual existence of a situation under which the general public enjoy lower prices at the expense of a decent standard of living for the farming population. This however, has not been the general experience. Where co-operation has been established the consumer does not as a rule pay more for his product; in some cases he even pays less. The extra returns of the farmer are a result of a sane and business-like marketing, of the elimination of all unnecessary expenses, and of the improvement in the quality of the product, and the extension of the market.

It is frequently maintained that a co-operative tends to become a controlled monopoly which will exploit the public by taking advantage of its control of the supply to fix prices. This assumption contains enough truth to make it
dangerous to the co-operative movement. In the first place a co-operative selling society is a monopoly in so far as it can gain control of the supply produced within its district. In the second place it does fix prices but no more so than the average business firm. Hitherto the farmer has taken his production to market and asked, "What will you give me for it?" And the buyer finding other farmers also waiting with their products ready for sale has given a price which in many cases did not cover cost of production. The co-operative knows approximately what supply will be, and is also in a position to estimate demand, and its price is fixed with reference to both exactly as a manufacturer decides what price he will charge for his goods. If the price be too high part of the supply will be left on his hands. The co-operative, then, does not fix its price anymore arbitrarily than does the ordinary business man.

As to the co-operative becoming a controlled monopoly which can exploit the public, that is impossible so long as the organization maintains its purely co-operative character and does not attempt to control individual production. Cooperatives which have taken advantage of their control of the supply to raise the price soon found that higher prices led to such an increase in production on the part of the farmers that they could not market the surplus. They defeated their own ends and not only did prices fall but a large part of the product was wasted. Potential competition by independents if the price becomes too high is another obstacle in the way of increasing it. As long as the connection with the individual farmer is limited to
marketing his product and giving him technical information which aids him to maintain a high standard of quality, the consumer is safe. The danger lies in the possibility that the co-operative may gain control of a large enough portion of the supply to be more or less safe from competition, and that it will then use its power to exploit the public. Hitherto that has not been the experience, possibly because farmers are not as easily controlled as business firms. Even if the co-operatives do tend to become exploiting monopolies, state regulation may be established to check their evil tendencies. At all events of the two evils, possible monopoly and certain disaster to a large part of the farming population, the former seems the lesser at present.

Co-operation in B. C.

It has been estimated that co-operation in general represents one tenth of the farmer’s problem. The other nine-tenths are problems of production. In B.C. today the statistician would probably find that it meant more than that. As far as production is concerned the farmer can hold his own. He has to face the usual pioneer difficulties of a new country, with an especial disadvantage in the high capitalization of land, but to counterbalance that he has a climate which is excellently suited for high production. B.C. Fresh Eggs are recognized all over the continent as of the highest quality; strains built up by B.C. poultry breeders are being exported all over the world; it was B.C. fruit growers who first introduced boxed apples to the
English market where they are rapidly replacing these in barrels. Yet in spite of the undoubted excellence of the product, farming in the last five years has passed through a depression which can only be described as disastrous. Far from making any profits the majority of farmers lost money, and with the possible exception of those in the dairy industry, the majority could be pointed to as thoroughly unsuccessful. A very large part of this failure can be laid at the door of non-co-operation.

Co-operation has been tried in several districts in B.C. and in several types of farming. Where it has arisen, it has been the result of extremity, the last hope of the farmers. It is always in the nature of an experiment, especially in a new country, and many of the mistakes made are necessary steps to progress. Co-operative societies depend essentially on the willingness of individuals to co-operate, and this is what has been difficult to obtain. A fairly large percentage of the farmers are men who have come to B.C. to retire; or to make farming supplement their small incomes. In either case they have a definite income, even if a tiny one, on which to live, and they are not dependent on their farms. These men are often stumbling blocks to the co-operative movement. It is not absolutely essential to them that they join the associations. The older farmers object to new developments to which they are not accustomed; they are used to individual marketing, and do not like the pooling of their produce with that of their
neighbors. As one official expressed it: "The younger farmers are easy to work with, but the older ones are hopeless!"

So far the most successful example of co-operation in B.C. is to be found among the dairymen. The Fraser Valley Milk Producer's Association was started in 1913 as a bargaining association. It next became a marketing co-operative; operating plants and handling the surplus milk. Today it operates the largest retail milk business in Vancouver through the Fraser Valley Dairies Ltd., a subsidiary co-operative devoted merely to distributing. Distributing costs are very low and the farmer gets the benefit. Milk consumers enjoy prices as low and frequently lower than those in any other important North American city. Producers receive 25% more of the consumers' money than they did in the days of independent marketing. The surplus of milk which varies in different seasons, is taken care of by the co-operative in condenseries, creameries, and cheese plants, which also take charge of the milk of those producers who are unable to ship into Vancouver. About one fifth of the capital of the Association is required to finance these plants. Good quality milk is insisted on, and must be maintained if the Co-operative is to keep up its reputation and prices. There is considerable competition from independents who are coming in from the prairies every year, but the Co-operative is too firmly established to be seriously menaced by them. The dairymen enjoy an exceptional advantage in having in Vancouver so large a market for whole milk, but the "fighting
funds" necessary to ensure successful competition had reduced their incomes to almost nothing in the days before co-operation was established.

The true test of a co-operative society is "How far is the organization socially beneficial and economically profitable?" The Fraser Valley Milk Producer's Association meets both queries; it has proved advantageous both to producer and consumer. It is noteworthy that the dairy industry of B.C. is the only branch of agriculture which has had an success at all in the past five years, and that the dairy industry is the only one in which co-operation is firmly established.

The situation in the Poultry industry has not yet been sufficiently serious to necessitate co-operation. An attempt in that direction, the B.C. Poultryman's Co-operatives Exchange, failed in 1923 as a result in part of the very bad conditions prevailing at the time, and no part of mismanagement. There is only an exportable surplus during a few months of the year. For the rest Vancouver presents a fairly stable market for eggs. Until the surplus increases to such an extent that it exists throughout the year, it is doubtful whether co-operation will again be tried and until that time the industry cannot increase to any appreciable extent beyond the needs of the home market.

The Poultry Breeder's Association of B.C. is a very young but exceptionally successful organization. In spite
of its youth and heavy overhead expenses it is already making profits for its members by the sale of high grade setting eggs and baby chicks. It has set an exceptionally high standard based on the Dominion Government R.O.P. regulations, and it is putting on a tremendous advertising campaign with the gain of extending its market throughout the world. Its immediate success would seem to indicate that one of the results of co-operation will be the greater importance and development of this branch of the poultry business, originally only a side line of egg producing, while the latter industry relatively declines.

The story of co-operation among the tree fruit growers is an unhappy one. Desperation led those in the Okanagan Valley to form the Okanagan United Growers in 1913. This, after the preliminary difficulties were surmounted appeared on the road to success. Markets were extended, and the famous "O.K." brand instituted. One great obstacle was the lack of size. B.C. apples are but a drop in the bucket of the world market, and unless the O.U.G. could manage the greater part of the B.C. supply it had not sufficient control of markets. The great drop in prices in 1921 and 22 was more than the organization, already suffering from mismanagement, could stand, and in 1922 it became bankrupt. The growers, in desperation invited Mr. Aaron Sapiro the Californian authority on co-operation to come to B.C. and consider the problem of organizing the apple growers of B.C. As a result of Mr. Sapiro's visit twenty horticultural organizations were formed during 1923, the majority
of which joined the B.C. Associated Fruit Growers, the successor of the ill-fated O.U.G. This association had great obstacles to face; it was formed during a period of low prices, and it had great difficulty in raising the necessary funds for expenses, the majority of its members being on the verge of bankruptcy themselves. The new manager resigned during the first three months and his place was taken by a local man who has succeeded in pulling the organization through the first two years and setting it on the way to prosperity. Returns to the growers were much better in 1924 than formerly, notwithstanding the heavy overhead. The future of the tree fruit industry undoubtedly depends upon the success of the Associated Growers.

The small fruit men have been organized into a number of co-operative societies, no one of which is large enough to control the supply. In addition there have been numerous local disputes and constant charges of management, assisted, it is now believed, by the influence of the hash combine of brokers and jobbers. The evidence put forward in the Duncan Report stresses again the necessity of distribution of the product by the farmers themselves. The middlemen were not content with the ordinary profit to be obtained from speculation in the fruit market, but took advantage of the ignorance of the farmer in business affairs to falsify returns and make the low prices he received still lower. Small fruits are so perishable that organized central distribution is essential to ensure their routing to markets where they are
needed and to avoid oversupply. At present the Mainland and Vancouver Island Growers are organized separately, those on the Island having a much smaller overhead and being unwilling to pay their share of the larger. However the Duncan Report has done much to show the need of unity, and it has also strengthened the Mainland organization by proving the integrity of its Manager, and hopes are expressed that the two will combine. The immediate result of their union should be the establishment of an adequate central marketing system which would eliminate a large part of the expense involved in shipping, and would ensure that a larger share of the price paid by the consumer goes to the producers.

The cattle and sheep industry in B.C. has great need of the establishment of some central market without which the farmers cannot increase their stock to any appreciable extent. It rests with them to increase their stock when prices are better and form a co-operative association which would enable members to market their product independently of Burns and Swift whose prices they are compelled to accept today.

Farmers throughout B.C. today are suffering from lack of co-operation. The only industry which is making even small returns is the dairy industry. That branch of the poultry industry which has established co-operation has infinitely better prospects than that which has not. Lack of co-operation is proving a great disadvantage to the cattle farmers. The failure of co-operation in fruit farming is not to be attributed
to faults of co-operation per se. Had co-operation been more firmly established it is probably that the difficulties of 1921-22, and L3 would have been far more adequately met. As yet the associations are only in the experimental stages, and experience is a hard teacher albeit a good one. Finally, mismanagement has been due in many cases to lack of the proper man as manager. If a man with the necessary business qualifications is brought from outside, he does not know district conditions. Also he demands an enormous salary which the growers are reluctant to pay. If a local man is appointed the chances are heavily against his having the requisite business knowledge, which is not such as is required of the average farmer. The position seems to demand specialized business experience and at the same time a knowledge of local farming.

Co-operation, then seems to be badly needed by agriculture in B.C. But a word of warning is necessary. Cooperative societies are by no means a panacea for all evils. They are merely an attempt to do away with some of the most prevalent evils that the farmer must face today. Their success depends upon the willingness of the individual farmers to maintain and improve the quality of their products, and to sink their petty quarrels and disputes for the good of agriculture as a whole. Without co-operation agriculture in B.C. is doomed to failure; with it there are still many lions in the path towards success.

(1) The man who has put the Associated Growers on its feet is a Summerland farmer.
Chapter 9.

One great drawback that B.C. farmers must face is the exceptionally high valuation that is set on land in this Province. Agriculture in B.C. can be divided broadly into two classes—those farms which produce largely for a domestic and those which produce mainly for a foreign market. The farmer producing for a foreign market must compete with farmers of other provinces and countries whose land costs them very much less; and the man producing for the domestic market must also face foreign competition although indirectly, for if he charges too high a price for his product, it will be imported from elsewhere. Thus the B.C. farmer has a great initial disadvantage to face, since land is his first necessity.

For 1922 B.C. stood first in the Dominion in the average value of occupied farm lands. The average in B.C. was $120 as opposed to Ontario $64.00, Quebec $58.00, P.E.I. $45.00, N.S. 354.00, N.B. and N.B. $32.00, Saska. $25.00, and Alberta 324.

The average value of orchard and fruit lands (including hedges etc) for 1921 and 1922 was:

<table>
<thead>
<tr>
<th>Year</th>
<th>1921</th>
<th>1922</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nova Scotia</td>
<td>117.00 per acre</td>
<td>123.00</td>
</tr>
<tr>
<td>Ontario</td>
<td>137.00</td>
<td>127.00</td>
</tr>
<tr>
<td>B.C.</td>
<td>320.00</td>
<td>320.00</td>
</tr>
</tbody>
</table>

B.C. besides having by far the highest value per acre, shows an increase from 1921 to 1922 while the other two fruit producing show a distinct decrease. The fall in values in B.C. came later.

On dairy farms the land is capitalized in Ontario at
$195.00 per acre, while similar lands in B.C. sell for $325.00 per acre.

If the high value of B.C. land is based upon its superior income yielding power then it should prove no disadvantage to the farmer. If it has in any way an inflated value, then it is a serious drawback.

Rent is the term usually used to denote the income derived from the ownership of land. In discussing the returns yielded by land as a factor of production the term "land income" is more comprehensive. It includes all the returns both material and psychic that the user obtains, such as situation, desirable society and climate. It is the "land income" in this broader sense that the farmer enjoys, and even if he desires only the material returns that a given piece of land will yield, he must pay in spite of himself for all the other returns which add to the selling price of the land.

The selling price equals the succession of future incomes, which it is anticipated will be derived from the land, discounted and added together, "in other words the present worth of a perpetual income." Very often the owner of the land overrates the future income and demands too much for his land. The purchaser finds himself handicapped by the necessity of paying interest, either to himself or to another on an investment.

(1) Ely: Costs and Income in Land Utilization P. 10.
(2) Ely: Costs and Income in Land Utilization P. 32.
which yields a smaller return than was anticipated. This has been the experience of many B.C. farmers. The value of farm land was inflated after the war (as a result of factors which will be considered later) Many people bought at a high price and then discovered that the income yielding power of the land was less than they expected. Land income may be either underestimated or overestimated in the selling price. In B.C. during 1920 and 1921 it was considerably overestimated.

The land income depends on many things quite outside the owner’s control. Conjunctural gains or losses are important. Those who bought land in 1920 paid a price based on the income yielding powers of the land at that time. But the future income was overestimated; it was assumed that the yearly income would remain approximately constant which it did not do. As soon as the price of the products of the land fell, so did the land income, quite apart from any action of the owner. Any increase in the price of products is likely, other things being equal, to increase the land income. Similarly any decrease in the price of products is likely, other things being equal, to reduce the land income. It follows that any great increase in population by increasing the demand for agricultural products, will tend to increase the land income and therefore land values. Similarly a decrease in population will tend to decrease land values.

Conjunctural gains and losses tend to move in cycles. While prices are high land income is high, and when prices are
low land income is low, and other things being equal, land values will follow the course of the business cycle.

The value of each acre of agricultural land in B.C. is based on conditions which apply to it in particular, and not to other acres. Among the causes of value are the fertility of the soil, climate, topography, accessibility to markets etc. Land which is valuable for small fruits is not necessarily so for dairying. It is difficult to compare the factors which affect the value of land in Central B.C. and on the coast. It is quite impossible to pick out any single factor as the cause of the high valuation of land but one can point to definite factors which make for high values.

On the whole, the value of agricultural land in B.C. has not changed greatly. It rose over the whole of the province after the war, but this may be accounted for by the inflation of the currency. But in certain districts land used for specific purposes increased in value considerably after the war; land suitable for poultry, tree fruits and small fruits increased greatly in value because of an accelerated demand, but even here it was only in certain districts. Small fruit land has lately increased in value in the Creston district at the same time as it has tended to fall in the Boundary district. To obtain an accurate result each small district would have to be studied by itself, and its use or fall in value compared with

(1) I have been unable to trace the change in land values with sufficient accuracy to make possible any comparison between price movements, and movements of land values.
the change in the purchasing power of money. Failing this the best that can be done is to point out some of the important factors affecting land values and incomes. These factors make for high values of agricultural land.

1. Exceptional demand.
2. High cost of improvement.
3. Climate.
4. Speculation.
5. Dislike of individuals to admit loss.
6. The case of land near population centres.

1. Exceptional Demand.

The value of land is governed like the value of all other commodities by demand and supply. "Ultimately the increase or decrease in the rental value of land depends, other things being equal, on the relation between the rate of the increase in the economic land supply, and the rate of the growth of population." The demand for farming land in certain districts of B.C. was enormously affected by the war. In 1919, 1920 and 1921 a large number of returned soldiers were attracted by the high prices then received by farmers, especially those engaged in poultry farming and fruit growing. The "Back to the Land" movement was fostered by the government through the Soldier's Settlement Board. At the same time are large number of immigrants from the British Isles who were disinclined to return to their pre-war occupations, came to B.C., attracted often by the climate. Improved or semi-improved land was in great demand, accordingly its price rose, and many farms changed hands.

(1) Ily: Costs and Income in Land Utilization p. 80.
Unfortunately for the purchasers they bought during a period of price inflation, and the high prices received for fruit in 1919 and 1920 were largely the result of that inflation. When the general price level fell the price of farm products fell with it. Production had been enormously increased both in the horticultural and poultry industries as a result of the temporary boom. This helped to glut markets and forced the price still lower. Therefore land incomes were considerably reduced, and the farmers found that they had paid for a future income which was not forthcoming. Accordingly the value of the land fell.

2. High cost of improvement.

The second factor leading to high values for agricultural land in B.C. is the high cost of improving land. B.C. is a new country and a mountainous one, consequently there are great expenses involved in the clearing and improving of the land. In some districts drainage is necessary and in others irrigation. There is land in the South Okanagan that costs approximately $600.00 per acre to clear and improve, the earning power of which, based on present prices, would be only about $500.00. The reason such land is cleared at all lies in the fact that its value to its owner depends on its future earning power. He anticipates an increase in the value of the land as its land income increases. The best time to purchase land is when prices are low and the expense of improving comparatively small. The man who invests his money in such land today must not expect an immediate return. He expects to receive his
returns in the future when there is a greater demand for land and its produce. Meanwhile his investment is safe, his land cannot disappear, even if he cannot realize it at a momento notice. Investing in unimproved land involves waiting and needs a good deal of capital; more than the incoming settler can usually afford. Therefore the value of improved land is increased because it will yield an income of some sort immediately and is therefore in demand.

3. Climate.

B. C.'s climate is one of her chief assets, and one which cannot be taken away from her at least until the coming of a new Ice-Age, or some similar phenomenon. The mild and equable coast climate is very well suited to poultry, dairying and fruit farming, while in the interior are districts suited to almost every other type of agriculture. In addition the climate is one which attracts immigrants of all types. The prairie farmers who find the climate too asevere are constantly coming to B.C., and the man who is retiring and who wishes to invest part of his capital in a small farm, finds a favorable situation on Vancouver Island. The climate ensures a fairly steady demand for agricultural land and this keeps up the price.

4. Speculation.

A great deal of land in B.C. was bought up many years ago by speculators who realized that the population and demand for land were bound to increase. They have had a monopoly of the best land in many locations and have used it to
obtain an exhorbitant price. Many bought land just before
the general rise after the war, realizing that the demand for
it would be great. Thus they have intensified the rise in price.
Much desirable land is still in the hands of speculators who
will hold it until its value rises.

When the speculators cultivate their land, as many
did as a result of the high prices of 1919 and 1920, they merely
make a bad situation worse. By buying and holding the land
they increased the demand for it, and therefore the height to
which values rose; and by producing they added to the glut on
the markets of the enormous fall in price resulting from it.
These influence in B. C. has not been for good.

5. The dislike of individuals to admit loss.

The reason that land values in general did not fall
more rapidly after 1921, can be found in the dislike of the
average farmer to admit a loss. He had paid too high a price
for his land, but he was unwilling to admit it; he did not like
to feel himself a poor business man. In consequence he con-
 tinued to quote his land at the price he paid for it, regardless
of the fact that he could not sell for anything like that
sum. His example reacted upon his neighbors who refused to ad-
mit that their farms were worth less than his. It was not until
it came to the point of actually selling his farm that his values
could be questioned. Actually very few farms have changed hands
within the last three years. The condition of agriculture has
not been such as to encourage prospective farmers to purchase.
also the easiest thing for the farmer who has paid too much for his land is to hold it and hope for the best. It is very unlikely that he will receive an adequate return on his whole investment; part of it must be written off as loss. But by remaining on the farm he has at least a sporting chance of receiving an income which will partly recompense him, whereas if he sells today, his loss is an accomplished fact, and can never be reduced in amount.

6. The case of land near population centres.

There is one case in which the price paid for the land is much greater than the income which can be derived from its products is worth. Land at Gordon Head, five miles out of Victoria and suitable for small fruits sold for very high prices during the boom. But far from falling value when the general depression came, it tended to increase. The increase does not come from its value as agricultural land, but from its anticipated income as a residential site. Part of the increase in value is an unearned increment, although part may be attributed to foresight. Dr. Marshall states that "Land near to a growing town, which is still used for agriculture may yield very little net rent; and yet be a valuable property. For its future ground rents are anticipated in its capital value; and further its ownership is likely to yield an income of satisfaction outside of the money rent received for it."

These are the most important factors causing high valuation of land in B.C. In so far as they have tended to make contract rent higher than economic rent, they act as a drawback to the farmer. From the individual viewpoint there is no surplus derived from the ownership of land. There is only a low return on the investment which has been made. It is a recognized fact that normally an investment in land will give a monetary return rather less than that afforded by other investments. A return of 3½% to 4% is considered good. That should be taken into account in examining the returns of the University extension surveys the figures of which were used in the earlier part of this essay. Interest on investment was charged in every case at 7% unless expressly stated otherwise. 7% was what the farmer had to pay on a mortgage but it was more than he should demand from his farm.

If the returns on an investment in land are smaller than those on an investment in other industries it may well be asked why there are any farmers at all. The reason lies in the particular advantages which the owner of land enjoys, and in the circumstances which differentiate agriculture from any other industry or occupation.

One reason why land yields a small return is that it is considered a safe form of investment. It has been described as the poor man's "Savings Bank." It is safer than an investment in capital goods because it cannot disappear or be wholly used up. It may be used for one purpose if not for
another, and there is always the chance of a sudden increase in value resulting from a movement of the population. There is of course, also the possibility of an unearned decrement, and an anticipated increase may not come for some time therefore the return which land will give to the investor is only about 4%. Farmers in comparing their business with those of manufacturers should not expect so great a monetary return both because of its greater safety and of the advantages which the farmer may enjoy and the man in industry cannot. In the first place he is enabled to live at home and work with his family. Business and social life are bound up together whereas in other occupations they are effectively separated. There may be disadvantages in this but as a rule it is considered desirable. The farmer runs his own business and need suffer no interference from outsiders, and in that he has an advantage over the ordinary wage earner. The farmer is both capitalist and laborer, and reaps the advantage of his double capacity in bad times, when if he does not receive enough to pay himself wages he can live off the interest on his investment and the unpaid labor of himself and his family. If he succeeds in improving the condition of his land, he himself reaps the benefit, and it is the hope that the value of the land will increase, either through his own labors or an unearned increment that makes many a farmer endure hardships and still remain on the land.

(1) This is assuming that he is the owner of the land. There is comparatively little tenancy in B. C.
The ownership of land carries with it a certain prestige, is a safe form of investment, and gives a chance for conjunctural gains, therefore although it requires more care and yields lower returns than other forms of investment, it is considered desirable.

When the farmer has capitalized all his advantages; the quality of the soil, climate, location, transportation and marketing facilities, social opportunities etc., his chances for gain are reduced to the possibilities of a conjunctural increase in the value of his land, and his own ability as a manager. Many a man has been ruined through purchasing too much land or investing too much capital per acre. It is ability to manage his increments of land, labor and capital in the most advantageous way, that separates the successful farmer from the unsuccessful.

If there is a continual tendency in agriculture to yield low returns it shows that too much labor and capital is invested in agriculture and those farmers producing on the margin should seek other occupations. But poor returns may be due to unstable prices, and attempts should be made to correct this through the better adjustment of production to demand, and by better marketing methods. Agricultural experts in B.C. do not believe that there is too much production, or that the number of men engaged in farming should be reduced. They point to the disorganization both in production and marketing that has prevailed hitherto and maintain that this can be remedied and the farmer thereby receive greater returns on his investment.
Governments are recognizing the necessity of adopting a definite land policy. The aims of such a policy should be three, viz: better production, better distribution and better population. The Dominion Government is attempting to further the first two aims by making available through the Universities information relating to improved production. Anti-dumping laws, protection, and assistance given to co-operative societies assist in distribution. The third problem, that of population is of great importance in B.C. today. Undoubtedly a larger population is needed for the development of the resources of the Province, but we have at the same time unemployment an evil which ought to be diminished not increased.

Hitherto the policy of land settlement followed by the Government has been largely through the Soldier’s Settlement Board, which has aimed at establishing settlers; mostly returned soldiers, on farms which they may purchase on easy terms through government loans. This scheme has not worked well in every case. Too many of the men settled knew little or nothing about farming and were of a type not suited to it. Conditions were very bad soon after their purchase making it difficult in many cases to pay off their loans. In spite of obstacles many of them succeeded as far as could be expected in the face of adverse conditions, others with the same opportunities gave up their farms.

These farms have come back to the Government and a new scheme has been devised to settle them. This apparently
does away with the greatest objection to the old, by very care-
ful selection of the immigrants. Through an arrangement between
the British and Canadian Government's, families which have had
farm experience and have, so far as can be ascertained, the
necessary qualities of honest, industry, and thrift, are
assisted in purchasing farms which both they and the super-
visors think suitable. The scheme is too elaborate to go into
here, but if as successful as is anticipated it will give B.C.
a valuable addition to the farming population. Here again the
most important single factor is the ability of the individual
farmers, and it is being recognized by the Government in care-
ful selection of the quality of the immigrants.
Chapter 10.

There are two difficulties that the B.C. farmer must face, which have hitherto been mentioned only incidentally but which are of great importance. The first is the question of Protection, and the second that of Freight Rates.

Agriculture throughout the Province is suffering from the very high tariff levied by the United States on agricultural produce. This of course has different effects on the different types of farming, but whenever there is any exportable surplus this barrier reacts disadvantageously by glutting the home market. The farmers as a whole are not demanding protection against high grade products. They feel that here they can hold their own, but they would like some check to be put on the dumping of low class produce into Canada by the United States producers. Also they would like a prohibition of the importation of United States produce before it is possible to put that of B.C. on the markets, in the endeavour to do away with the advantage of an earlier season which is possessed by their competitors south of the line.

The question of freight rates has received considerable attention of late. Suffice it to say here that the B.C. farmer does labor under a considerable handicap when he brings in feed or agricultural implements from the East, and this adds to his cost of production.

Agriculture in B.C. has, on the whole, been a
failure during the past four years, as far as making a good living is concerned. An attempt has been made to enumerate the different reasons for this failure. There is only one remedy for it, and that lies largely in the hands of the farmers themselves. It is education, more education, and still more education. The farmer must cut down his cost of production and to do this must have the requisite technical knowledge. The government has recognized this, and the means of obtaining information have been thrown open to the farmers. There are five Dominion Government Experimental Stations in B.C., situated at Invermere, Summerland, Agassiz, Sidney, and Salmon Arm, the last named being a substation. The information obtained through the experiments made on these farms is at the disposal of the farmers. Both Dominion and Provincial Departments of Agriculture publish statistics and information related to production. The Extension Department of the College of Agriculture at the University is doing excellent work among the farmers, introducing the most modern methods of production. The annual extension surveys give the farmer some idea of how he stands, and show him what he frequently does not know, namely where and how he is losing money.

After technical education the farmer needs instruction in business methods. Many farmers do not keep books and have only a very vague idea whether they are making or losing money. They cannot tell which of their undertakings are profitable and which are not. With a set of books, not necessarily elaborate, they can find out just where they stand, and can
eliminate those operations which are not profitable. It is not possible to manage a farm well, unless there is a fairly exact knowledge of the returns which different factors of production yield. The farmer frequently claims that he has no time to keep books. If he spent a little less time pottering round his outbuildings, he would have enough opportunity not only to keep a simple set of books but also to keep his technical and general education up to date. No business firm would for an instant consider operating without any accounting system, but this is exactly what the majority of farmers do, and a farm after all is only a specialized form of business unit.

The farmer today is irrevocably connected with the business world. His period of "splendid isolation" is over. For better or for worse he is now a specialized unit in the production of the whole world. Therefore he must keep abreast of the times and leave his extreme conservatism behind. Co-operation must take the place of individualism and blind competition. Until the farmers of the Province realize this, they cannot establish their industry upon a firm basis, and education, whether it comes through bitter experience or more easily, is what is needed to induce co-operation. The effect of education on the younger generation of farmers who were not reared in the individualist atmosphere of their fathers, can already be seen. They are eager and willing to learn and to co-operate. It is the older men who grew up under a laissez-faire regime who object so strenuously to any interference in the methods which they have pursued throughout their lives, and their fathers before them. Education is the sole hope of the farmers of B.C. today, and the sooner they realize it, the better for them and for the whole Province.